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THE MECHANISM OF EXCHANGE

A HANDBOOK OF CURRENCY, BANKING & TRADE IN PEACE AND IN WAR

BY

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PREFACE

As a result of the War, Economics has come into its own. Its reputation of a generation ago as the dismal science had for many years before the War been gradually giving place to a fuller appreciation of its value as the science of everyday life; but its practical importance never came home to the man in the street, and especially the business man, as it has done since the War. The reason is very simple. The War has struck at the very roots of our whole business and financial system, by its devastating effects on our foreign trade, and therefore upon all the complicated financial machinery which has grown up round international trade. Even before the actual declaration of War that system had, for the time being, almost completely broken down, and the disturbing effects upon our business and manufacturing interests were so widespread that every one was affected, even although he never touched foreign business at all. Our internal monetary and financial system was involved in the breakdown of the foreign exchanges, so that the trouble was brought home to every one in the most direct way, through his pocket. The natural result was a striking revival of interest in economic problems; and questions of currency, banking and trade naturally attracted the greatest attention, because they were the

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first to be affected by the convulsion. Business men of all kinds, finding their business paralysed by the breakdown of the usual monetary and financing facilities, wanted to know why, and they found that the answer lay with the economists.

This newly realized importance of their subject is naturally gratifying to economists who have always believed in their science, but it imposes a corresponding obligation upon them, which unfortunately many of them are at present too busy with actual war work to meet. The teaching of the subject, not only after the War but now, must be brought up to date, by showing how the experience of the War has confirmed or modified the accepted doctrines of economics or their form of presentation. New text-books on every branch of the subject will be required showing how our old ideas stood the test of unprecedented conditions. It may well be argued that it is foolish to tackle these problems until the crisis is past and we can survey the results in something approaching a complete state. But there are two reasons why such a counsel of perfection cannot be followed in this case. The need for some sort of assistance to the ordinary business man in tackling the new problems of the day is too pressing to wait. He wants to understand *now* what happened in the early days of the War, in order that he may if possible have some idea what to do under the new conditions which may emerge even before the War is finished, and which will certainly face him as soon as the War ends and the reconstruction of our business world on a peace footing begins. Secondly, it is quite impossible to say *when* economic conditions will

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once more have returned to anything like a static condition, when adequate scientific treatment of the whole position will become possible. It will certainly not be for many years after the War.

It seems therefore imperative, even while fully recognizing that our present knowledge of the facts is incomplete, and in spite of the danger of premature conclusions, to make an immediate attempt to revise our text-books of economics by interpolating into their pages some account of what happened in the early days of the War, and how events have shaped themselves since during its progress. It may seem to some that that is not sufficient, that what is wanted is an entire recasting of all previous teaching of economics, which would in effect amount to the creation of a new science. But the writer would contest that view with all his force. There is much loose talk about abandoning the principles of certain so-called schools of Economics, but one can no more abandon economic principles than one can abandon the law of gravity. The principles of economics are very few and simple, and are so axiomatic in character that when properly understood they command the assent of every one. But the difficulty lies in their application under different conditions. It is the conditions which have changed in innumerable respects since the War, and what is wanted now is a new presentation of the principles in conjunction with the altered conditions. In the fiscal controversy, for example, which promises to revive after, if not during, the settlement of the terms of peace, the attitude of the economist will not be changed in the slightest from that of any sound and unprejudiced econo-

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mist before the War. The economic principles of international trade are unaltered; but the conditions both of this country and of others have changed considerably, and it will then be, as it has always been, a question whether the undoubted advantages of free trade are *under these new conditions* outweighed by the anomalies and difficulties to which free trade exposes us, or by the advantages of an opposite policy. The business of the writer of an economic text-book is not to set forth his own views on the balance of the advantages and disadvantages, but to state as impartially as he can the arguments on both sides and leave the decision to his readers with such knowledge of the facts as he can put before them, or guide them into obtaining for themselves.

In preparing this book the writer has attempted to carry out his long-cherished ideas of how economics ought to be studied by the elementary student or by the business man who wants to understand how economic problems affect him in his business. Economics is the science of everyday life, and its study must be a constant application of theories to actual conditions. It must above all things be a living science, enabling the student to see his own everyday life through economic spectacles, to realize that he is 'living' economics all the time. To do so he must be taught not only the accepted theories on the subject, but also how and where to get the facts, how to handle these facts, and how to appreciate them rightly. With this view a certain amount of statistical information on the problems dealt with in the book has been collected in a series of Appendices, with in every case the source of the information. These figures are at

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present necessarily very incomplete, for in these days statistics become out of date with bewildering rapidity, but the expedient of collecting them in appendix form has been adopted in the hope that it will facilitate revisal as events develop.

In selecting illustrations of points of economic principle the writer has not scrupled to draw rather freely on Egyptian and Indian conditions (as well as European and American), not merely because of his own interest in Eastern countries, but because it is peculiarly useful to those who are only familiar with the conditions of the Western world to realize that on many questions their point of view is just as distinctively and exclusively their own as is the totally different point of view of the Oriental. It is good for us in economics as well as in other things to see ourselves as others see us, if it helps us to see ourselves as we really are.

At the end of each chapter references are given to the particular chapters of any book which the writer has used, or to other books which the student should find useful for further reading in conjunction with the chapter. In this way it has been hoped to avoid the necessity of frequent references throughout the text, which are worse than useless to the class of readers the writer has in view.

JOHN A. TODD.

UNIVERSITY COLLEGE, NOTTINGHAM,
March 20, 1917.

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CHAPTER I

INTRODUCTORY

The meaning of exchange value.—Money the means of exchange.—Prices and value.—Possible effect of the mechanism of exchange upon values.

THE various economic problems dealt with in this book are comprised under one general heading, the Mechanism of Exchange. Economics may be defined (somewhat elliptically [1]) as the Science of Exchange Values or the science of prices, which are exchange values expressed in terms of money. Money in the widest sense of the word, including metallic money, paper money, bankers' money, and the credit system, is the means of exchange. The essential purpose of exchange is the determination of the relative values of different commodities to each other, and these values are for convenience expressed in terms of money as prices. The use of money, however, as a means of exchange must not be allowed to obscure the fact that the real value of any commodity is not the amount of money for which it is exchanged, that is to say its price, but the amount of other commodities which can be obtained now or later on in exchange for that money. Price is only a means of expressing the relative value of two commodities by comparing them, not directly with each other, but indirectly through the universal third commodity, money. For instance, it is more convenient in discussing the relative value of a pound of tea and a pound of sugar to say that the one is worth *2s. 6d.* and the other worth *6d.* than to say that the one is worth five of the other.

The object of Exchange

Meaning of Price.

[1] The full definition, founded on Marshall's, should be 'the science of the motives or notions of value which actuate men in the acquisition and use of wealth'.

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Money is therefore the standard of value, the means by which the value of different things is measured against each other, just in the same way as the relative height or weight or age of things is measured, not by comparing them with each other, but by describing each of them in terms of certain accepted standards known as feet, pounds, or years.

But the use of such standards of measurement involves a serious responsibility; the standards must be accurate and especially they must be as nearly as possible invariable, and uniform. It does not matter in the least what the exact standard is, but it must be always and everywhere the same.

Meaning of a standard.

Thus it does not matter at all what is the exact length of the standard of measurement called one foot, or how many feet it is decided to call one yard. But it is absolutely essential that all foot rules and yard measures should be of exactly the same length and that they should always remain the same length. One draper cannot be allowed to keep a shorter yard stick than his neighbours, because that would be cheating his customers. The whole point about a standard measure is that it must be publicly known, and certain, so that when that standard is used in any bargain the buyer knows exactly what he is receiving, and the seller what he is giving.

The application of these requirements to the standard ot value, that is to say to money as the measure of values, is not so obvious, but it is just as necessary as in the case of any other standard. In the first place, all coins of the same denomination must be of the same value; we cannot have different sovereigns in circulation some of which contain more gold than others, otherwise it would never be possible to measure the price paid for an article without knowing which kind of coin was tendered in payment. This is an obvious necessity, but there is another much more difficult test to be applied to the efficiency of money as a measure of value. The value of a perfect money must be the same everywhere and always, and that is a very difficult thing to secure. The

The value of money.

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real value of money is its purchasing power, the quantity of goods for which a certain quantity of money can be exchanged, and as a matter of fact it is almost impossible to prevent that purchasing power of money varying from one place to another, and especially from one period to another. But such variation is fatal to the perfection of money as a standard of value. It is just as if a draper kept an elastic yard stick which was longer at one time than at another; or, to take a more practical illustration, as if the builder of a huge bridge used a steel measuring chain which expanded and contracted with the variation of temperature from day to day. Both stone and metal vary greatly with changes of temperature, especially in a climate with extremes of heat and cold such as Egypt or India, and it is necessary in the construction of large engineering works to make the most elaborate calculations to prevent the accuracy of the work being thrown out by these variations.

A variable standard.

The difficulty in the case of money is perhaps greater than in the case of any other known standard, because it is now well known that its value does vary greatly from time to time,[1] and sometimes from place to place, and these variations are to a considerable extent inevitable under any monetary system which it has yet been found possible to invent. During the last forty years the value of money as a whole has first fallen and then risen again very seriously, and the results have been sometimes disastrous and always very inconvenient. For these variations may result in an actual disturbance of the relative values of commodities to each other. Suppose for example that a man sells certain goods to-day for money and lays the money by, but a few years later he finds it necessary to sell this money again, or in other words to use it in the purchase of other goods. In the meantime the value of money has fallen; that is to say the price of commodities in general has risen and he cannot now buy so many commodities of any kind with his money as he could have done at the time when he sold his original goods. The effect is to alter the relative

Effect on values.

[1] See Table V and Diagram C in the Appendix.

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value of the goods he sold and the goods he now wishes to buy, for he finds that he gets fewer of the latter for his own than he expected. The relative value of the goods he sold and those he now wishes to buy has been altered by the change in the value or purchasing power of the money which was used as the means of exchange. It is as if his yard stick had contracted.

Knowing then that such changes in the standard of value may take place, it is necessary that the character of money and its work should be carefully studied so as to find out the nature of money, how it does its work, why these changes in its value take place, and if possible how to modify or prevent them, and that is the underlying object of this book. The mechanism of exchange must be studied in all its forms, for the comparatively simple expedient of using metallic money as the means of exchange has developed into a marvellous and most complicated system of using all kinds of different things as money, including even pieces of worthless paper, which yet under certain conditions seem to serve the purpose of money extraordinarily well. Finally, a system of credit and banking has been developed which may be described as a system of doing money's work without the use of any form of actual money at all. All this complicated machinery must be carefully examined to see how it works, and what are its effects on the main purpose of it all, which is the exchange of goods against goods; and this is to be the connecting thread which will run through the whole argument of the book. It is an attempt to see how all the different forms of money or money substitutes have come into existence, how they are used, and whether they fulfil satisfactorily their main function as the means of exchange, a means of expressing the relative value of commodities, for money is only a means to that end. Economics is not the science of wealth in the sense that it teaches men only how to make or spend money; it is the science of values, the study of the relative values of all the different commodities and services which men spend

The money system.

The science of values.

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their lives in producing and consuming, in rendering and receiving. These and not the money are the real subject-matter of its study. This branch of the science is therefore, in a sense, subsidiary, but it is of the greatest importance and interest. It is the side of economics which deals most directly and exclusively with the problems of the business world, and which therefore appeals most directly and forcibly to the commercial man. Economics was described by Marshall as the science of everyday life, and in this branch of the subject the fitness of the description is peculiarly apparent.

DEL MAR, *The Science of Money.*

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CHAPTER II

THE HISTORY OF EXCHANGE

The place of exchange in production.—The development of exchange.—Its advantages.—The essentials of exchange.—The trader class.—Means of transport.—Money breaks up barter into sale and purchase.

It was customary among the older economists to treat exchange as a separate branch of Economics from production, dividing up the subject into Production, Exchange, and Distribution, and later on Consumption was added as a separate branch of the subject. This method of treatment had its advantages in clearness and convenience of arrangement, but it must not be allowed to conceal the fact that in reality exchange is a part of the process of production. Production means the creation not of things but of utilities. Man cannot create matter, any more than he can destroy it. He cannot make anything except out of something else; he cannot make a piece of wood, but he can make a table out of a piece of wood. This idea is expressed in the definition of production as the creation of utilities. Man cannot make things, but he can make things useful, and it is clear that the process of making a thing useful is not complete until some person is found who can make use of the thing. In other words, the process of production is not complete till a purchaser is found for the article. This is very clearly seen in the case of perishable articles, such as fruit grown at a distance from any market. Thus it may be said that the complete process of production involves three stages: (1) change of form or production in the narrowest sense of the term, as the farmer produces wheat or the carpenter produces the table; (2) change of place or transport, as the miner digs the coal or iron out of the mine and

Meaning of Production.

Its three stages.

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brings it to the smith, or the ship brings Canadian wheat to Liverpool to be made into flour and bread in England; and (3) change of ownership, as the merchant finds purchasers for the goods offered by all the producers. Under modern conditions every one of these parts of the process is equally essential, for all the nations of the world are dependent upon each other for their food and clothing, and in every civilized community each individual is dependent upon all his fellows for the necessities as well as the comforts and even luxuries of life.

In the early forms of civilization, however, when the family or the tribe was the unit of society, and these units were small and self-contained and mainly nomadic, there was practically no exchange because there was no need for it. Every member of each tribe was engaged in the same occupation, and therefore produced the same commodities as his neighbours. There was a certain amount of division of labour, especially between the sexes, and in the primitive form of the tribal craftsmen who performed certain work for all the members of the tribe in consideration of a share of their produce. But when a chance encounter brought the tribe into contact with a friendly tribe from another country, real opportunities arose for something like exchange in the modern sense of the word, because these other tribes, coming perhaps from a different district or country, would possess things which the others had not, and would greatly desire those things which to the first tribe were commonplace and therefore of little value. Exchange under these conditions was natural, being equally advantageous to both parties. Thus exchange was in the first place inter-tribal or international rather than local. It probably arose from the custom of making conciliatory gifts to a possibly hostile tribe met by the way, and it came to be regarded as a matter of course that the gifts must be mutual: each tribe expected to receive a gift of at least equal value to what it had given. Gradually journeys came to be undertaken purposely with a view to the possibility of such meetings and the resulting exchanges.

Primitive exchange.

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With the settling down of nomadic tribes in fixed localities which marked the development of agriculture, and the growth in size of the settled communities, the division of labour became more necessary. As the size of the community increased there was enough work of a particular kind, such as the smith's or the shoemaker's, to employ one man's whole time in making such things for the community. There were also the hunters and the fighting men who went abroad, while the husbandmen remained at home to cultivate the crops. Under these conditions exchange of the different products was essential, and as the village developed into the town and the town into the nation, exchange became wider and more universal. Nowadays in Western countries no one ever makes any complete thing for himself, and with the development of the factory system of production by machinery hardly anybody makes a complete article with his own tools or machinery out of his own materials. Every one makes for exchange, and the complexities of exchange have increased as fast as the development of specialization and the growth of division of labour.

Division of labour.

While many features of this wonderful modern system may be deplored, it has certainly enormous advantages. The great wealth of which the modern world disposes, meaning not merely the wealth in money of certain individuals, but the widespread distribution among all classes of society of the comforts of civilization, would have been utterly impossible in any other way. For the advantages of exchange are just those of the division of labour. Exchange is indispensable to the modern system of organization of production to which the enormous production of wealth is due. But in this vast system there are many producers who seem to take no active share in the production, those who merely pass things from hand to hand, middlemen as they are called slightingly, whose right to a share in the produce is sometimes questioned. It must be made clear, however, that there is no ground for this distinction. Every person who is really necessary to the process of exchange, including the finding of a consumer for the goods produced, is

Advantages of exchange.

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justly entitled to a share of the produce. The middleman is just as much a producer as the farmer, as long as he is necessary. Of course, a superfluous middleman is as useless as a second farmer would be ploughing up ground already sown, and growing another crop on top of the first. A middleman who has somehow contrived to insinuate himself between the producer and the consumer without serving any necessary purpose in bringing them together is altogether indefensible, and there are doubtless many such people in certain countries or certain trades, but they are probably the exception rather than the rule. The utility of the genuine middleman who facilitates exchange is as undeniable as the advantages of exchange itself. By exchange every man is able to barter his own surplus produce for things which form the surplus of others, but which are of great value to him. The mutual gain of subjective utility to both parties underlies every act of exchange, and this applies just as much to exchanges between individuals of one country as to exchanges between different countries. Exchange leads to the full utilization of the productive capacity of every man or of every nation, thus securing the maximum total production for the nation and the world.

Middlemen.

The development of exchange and the growth of the modern trading system with its elaborate mechanism of exchange involves three essentials: (1) the formation of a class of merchants or traders to act as middlemen between the producers and the consumers; (2) the development of the means of transport, both for long and short distances, including the carriage of commodities, like wheat or raw cotton, across half the world, as well as the door-to-door delivery of daily household supplies by a retail shop; and (3) the invention of money as a means of exchange.

As already suggested, trade was at first not local but inter-tribal or international, that is to say it was carried on with foreigners, and as in those days foreigners meant enemies, trade was at first characterized by all the methods of war rather than of peace, each party doing his best to cheat or rob the

The trader class.

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other, either in the course of bargaining or by more flagrant violence. The merchant of the early days carried his life as well as his goods in his hands. The risks of trade were great, and the profits had to be correspondingly high.

Another interesting feature of the evolution of trade is the change from the early trader seeking his customer to the modern system of retail shopkeeping where the customer seeks the trader. This had its effect on the character of the goods which were the objects of trade. In the early days these were naturally confined to goods of considerable value in proportion to their weight or bulk, and not of a fragile or perishable nature, so that they were capable of being carried long distances, such as brick tea carried mostly on camel-back from China by the overland route through Siberia into Persia, India, and latterly all Europe.

Their functions.

The advantages of the modern trader class may be illustrated by considering the extent to which townspeople nowadays are dependent upon the system of wholesale and retail traders for the supply of their ordinary daily food. The shopkeeper and the wholesale warehouseman form the link between the producer, perhaps in a distant country, who has neither time, opportunity, nor knowledge to seek retail customers, and the consumer who cannot seek the different producers, spread all over the world, from whom he would buy what he wants. In fact, new wants have been created by the extraordinary development of the system of supply, which brings all the products of every country in the world and puts them down almost at our doors to tempt us to buy. Taking the contents of an ordinary grocer's shop for example, it would exceed the limits of the average customer's knowledge of geography even to know where the places are from which the different goods come. Again, these wholesale traders deal in large quantities, so that they are able to buy much more cheaply than the ordinary retail customer could possibly do, because it is easier and more economical for the producer to deal with one large consumer than to seek many small buyers. In some trades, as, for

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example, the Indian tea trade, attempts have been made to sell straight from the gardens to the home consumer, but the volume of trade which has resulted is comparatively small. Lastly, the wholesale trader and the shopkeeper maintain large and varied stocks, enabling the customer to select whatever he wants and at whatever time he likes. The ordinary householder does not require to lay in a large stock beforehand, because whenever he runs out of anything he can buy at once from the shop near at hand. The shopkeeper undertakes the duty and runs all the risks of keeping stock, which in the case of perishable goods is considerable, and may involve heavy loss at times.

Transport.

The considerations which affect the development of the means of transport are (1) the great distances to be traversed, leading to cost of carriage, which may be heavier than the value of the goods will justify; (2) the nature of the goods themselves; fragile goods, for example, may suffer heavy loss by breakage in transit, which must be covered by a correspondingly higher price for those which survive the journey; (3) the development of the available methods of transport. This in most Western countries has followed a fairly regular routine, viz. first the sea or large rivers, then roads and canals, then railways. In the East, however, long-distance transit was by overland routes probably for many centuries before the sea was ever attempted, even in the case of countries like India, which had a large seaboard. The Nile in Egypt is probably the most striking case of the main line of transit of a country being from the earliest days chiefly by water, and Egypt made no attempt to develop land transport to any great extent for many centuries, nor sea transport for still greater ages.

Money *v.* Barter.

The last stage in the development of exchange is the invention of money and the breaking up of barter into sale and purchase. Barter means the direct exchange of goods for other goods, and seems to offer the simplest and most direct method of arriving at the relative value of the goods which are compared directly with each other. But even in the most primitive

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societies this method of exchange involves great difficulties in practice. It may be easy enough to determine the relative value of the commodities to be exchanged, but this is only half the difficulty. For before any exchange can take place three conditions must be fulfilled. In the first place, there must be two people each of whom wishes to dispose of the very thing that the other wants, which is a very unlikely coincidence. In the second place, the things which they desire to exchange must be of equal value; and finally, both must be desirous of making the exchange at the same time. As the result of the practical impossibility of securing this triple coincidence, it is often found that even where the custom of barter is general it has to be made trilateral instead of bilateral to make it possible at all. *A* exchanges his goods with *B* for something which *A* himself does not want but *C* does. Thus *A* gets what he wants from *C* by giving him *B*'s goods in exchange. But all these difficulties are solved by the introduction of a universal third commodity called money as the means of exchange. Every man, instead of exchanging his goods directly for those of others, sells his goods for money with which he buys other goods of whatever kind from whatever person in whatever quantities and at whatever time he likes. Thus money breaks up the single act of barter into two separate acts of barter, one of goods for money, called sale, and the other, which may be far apart in time and place from the first, of the same money for other goods, called purchase.

But although these two processes are now separated, the relation between them must not be forgotten. Every purchase implies a prior sale, and every sale points to a future purchase. The essential fact is that every man lives by exchanging his products or services for the products and services of others.

Double barter.

The ultimate object of production is not sale, but exchange of the product for other commodities, and the ultimate consumption of these others. Hence the point emphasized in the previous chapter, that the real value of any commodity is not the amount of money for which it can be sold, but the amount

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of other commodities for which through the medium of money it can be exchanged. Price is simply a means of expressing the exchange value of things. The real exchange value of goods is the amount of all other commodities in general for which they can be exchanged through the medium of money.

GIDE, *Political Economy*, Book II, chaps. i–iii (Archibald's translation, 1914).

JEVONS, *Money*, chap. i.

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CHAPTER III

MARKETS

Markets and market price.—Meaning of a market.—Law of markets.—Local *v.* world-wide markets.—Short *v.* long markets.—The Stock and Produce Exchanges.

In the previous chapters it has been explained that the subject-matter of this book is the mechanism of exchange, the means by which the prices of commodities are paid. It does not come within its scope to explain in detail how these prices are fixed. For that reference must be made to any standard text-book of economics which deals with the theory of value. Here it must suffice merely to state the result of that theory in the most general terms, namely, that the price of any commodity is fixed by the opposing forces of supply and demand working upon each other in a more or less competitive market. The market price of any commodity is the price which, under the existing conditions of supply and demand, either for the time being or over longer periods, balances or equates supply and demand, the price at which the amount offered for sale is just equal to the amount demanded; in other words, the price at which the buyers will be willing to buy just as much as the sellers are willing to sell. It is obvious that the quantity which the buyers are willing to take and the quantity which the sellers are willing to give both depend upon the price asked or offered; that indeed is the essence of the economic laws of supply and demand, which may be very briefly indicated in the two statements that the higher the price the smaller will be the demand and the greater the supply, while, conversely, the lower the price the smaller will

Theory of value.

Market price.

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be the supply and the greater the demand. The fixing of market price by the balancing of these two opposing forces is like a man bearing two weights (which may be unequal and may vary) on a pole slung across his shoulder; to make the weights balance he must move the pole back or forward on his shoulder till he finds the one point at which owing to the principle of leverage they will be exactly equal for the time being. In practice this market price or equilibrium price is arrived at more or less blindly by competition of buyers and sellers in the market, and the point at which the price is fixed depends largely on the conditions and character of the market.

In order to understand the mechanism of exchange it is therefore necessary to discuss more fully the idea underlying the word 'market', for the market is as it were the arena in which the forces of supply and demand carry on their continual struggle over prices. The organization and methods of operation of the world's markets are therefore an essential part of the mechanism of exchange.

Meaning of market.

The popular idea of a market is a place or a building where the buyers and sellers of a particular commodity meet to carry on their trade. But among business men the word is used in a much wider sense which is nearer to its economic meaning. They speak of the market for cotton, for example, as meaning something quite different from the actual building of the cotton market or exchange. A market in the economic sense of the term means the whole area over which the consumers and producers of a commodity are spread. The essential feature of a market is that within the area of the market there is free communication between the producers and the consumers, both in the sense that buyers and sellers alike are well informed as to what the others are doing, and also in the sense that the commodity itself can be moved easily from one part of the market area to another, in response to the varying conditions of supply and demand in different parts of the area. Thus it means that if prices are cheaper in one part of the area than in another, the buyers can go to the cheap place to buy, while on

Free communication.

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the other hand the sellers can remove their supply to the district where better prices are obtainable. The result of this free communication in the double sense is to prevent any variation of prices in any part of the market area; in other words, in a really perfect market, in the economic sense of the term, the price of the commodity must be the same all over the area of the market. In Western markets the spirit of public competition makes the seller advertise his prices in order to tempt customers to buy from him rather than from some one else. This publication of prices is the essence of the Western methods of competition; by it the consumers can compare the prices of all the different merchants and select the cheapest. The natural and inevitable result of this system is to preserve the uniformity of price throughout the whole area of the market. No one will buy goods from one dealer knowing that another is willing to sell the same kind of goods at a cheaper price; just as no dealer would be so foolish as to charge a high price knowing that his neighbour was offering to sell the same goods at a lower price. Thus competition in the market produces uniformity of price; hence Jevons's Law of Markets or Law of Indifference says, *In the same market there cannot be two prices for the same commodity*. But this does not go to the root of the matter so well as Marshall's definition of a market as *any area in which the buyers and sellers are in such free communication that prices tend to equate easily*. The root of the matter is free communication, publication and comparison of prices, and easy transference of supply or demand.

Uniformity of price.

Jevons's Law of Markets.

So far for the theory of a market. It has next to be explained that markets differ very greatly in two respects, which may be described as space and time. A market may be small or large, it may be short or long, and the nature of prices in the market will depend largely on these different conditions of the market. It is necessary therefore to discuss the considerations which affect the extent of a market in these two senses of space and time.

Area and duration of market.

(1) Space. A market may be so small as to include only the

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dwellers in one small village or town, or even in one district of a large town, or it may be so large as to include the whole world, such as the market for cotton goods, which is as nearly world-wide as that of any commodity in the world. The difference depends mainly on the nature of the commodity. To command a wide market a commodity must be (*a*) an object of universal demand, like wheat or cotton. The market for commodities which are only thought desirable by a comparatively small number of people or by certain races must be confined to the area in which they live. It would not be easy, for example, to dispose of a stock of betel-nut in England or of heavy furs in Southern India. Extent of a market.

(*b*) It must be easily described, sampled, or graded, so that a man proposing to buy a certain lot of the commodity may have it described to him exactly by letter or telegram, or by word of mouth in a way which he can understand readily and without any doubt as to what the seller is offering. This makes it possible to buy and sell without actually seeing the goods in bulk, so that it becomes possible to deal in such goods across half the world by post or cable. Thus wheat can be sold by sample, and cotton is continually sold by description on certain standard bases; but one could hardly buy a horse without actually seeing it.

(*c*) It must be portable; its value must be fairly high in proportion to its bulk or weight, so that the cost of transport is not excessive. Thus wood for building purposes is very expensive in Egypt, yet in the backwoods of New Zealand it costs a great deal of money to destroy good wood so as to clear the land for cultivation. The cost of transport makes it absolutely impossible to transfer the wood from one part of the world where it is worth less than nothing because there is no 'market' for it, to another where it would be of great value. Portability.

(*d*) It must be durable, that is to say neither fragile nor perishable, so that transport over long distances, which involves considerable time, and perhaps rough handling, may be possible. The English meat trade, for example, has been absolutely revolutionized by the development of cold storage in ships, Durability.

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which makes it possible to carry fresh mutton from Australia or meat from the Argentine to England, with the result that the whole world is now almost one market for meat, and the wholesale prices of meat in these distant parts are approximately the same as in London, allowing for the cost of carriage.

Duration of a market.

(2) Time. A market may be very short in the sense that the supply and demand which are taken into account in fixing the price are necessarily only the quantity immediately available for sale, or the quantity which can be consumed to-day; or it may be very long in the sense that the consumers can either buy to-day or wait till to-morrow, or they can buy enough to-day to satisfy their requirements for the next six months, because the commodity will keep perfectly well. On the other hand, the sellers in a 'long-period' market, as Marshall calls it, are not dependent on the immediate supply because they know that further supplies are coming, nor are they forced to sell to-day because again the commodity can be kept for a better market in the future if prices now are not satisfactory. These considerations as to the duration of a market also depend

Nature of commodity,

largely upon the nature of the commodity. Thus (*a*) it depends upon whether the commodity is perishable or not. In the case of fish, for example, the seller must obviously take what price he can get to-day because the fish will be bad to-morrow; while on the other hand the housewife cannot purchase any more than her household can consume in a day, no matter how cheap the price at which the fish is offered, because the surplus would not keep beyond to-morrow.

of demand,

(*b*) The length of the market depends on the probable duration of the demand for the commodity. Is it a thing which is likely to remain in constant demand, like wheat or other food products, or is it something for which the public have merely a temporary need, something which has become the fashion for the time being, or for which they have taken a passing fancy?

and supply.

(*c*) Is the supply limited to the existing stock, like some unique curiosity or work of art, or is it a regular crop, capable of

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being estimated in advance and relied upon as a regular periodic supply (though the exact amount may vary from year to year), like the world's wheat or wool crops; or again, is it a case of manufactured goods of which the supply can be increased to any extent required, like the increased supply of munitions in the world during the war?

World's markets.

These, then, are the conditions which have led to the development of the world's great markets in such commodities as wheat, wool, cotton, iron, steel and copper, and other necessaries of life, the demand for which is practically universal, while their production extends over very large parts of the whole globe. It is necessary next to consider the lines upon which these great markets carry out their world-wide operations, for their methods are all very much alike and are all more or less framed upon one model, that of the most world-wide market of all, the market for money. The methods of trading in the world's great staples, both in actual purchases and sales and in the special branch of trading for future requirements which is called speculation, have all grown up round the methods of the Stock Exchange, which is the centre of the world's market for capital. The primary function of the Stock Exchange is to create a market for capital, to find capital for the formation of new companies, to buy and sell stocks and shares of existing companies, and to float and deal in government loans and stocks.

The Stock Exchange.

The main fact about the whole of the regulations and methods of the Stock Exchange is that they are all directed to one end, viz. to make it possible to do the largest amount of business in the shortest time. All kinds of special arrangements have been invented or gradually perfected, the primary object of which is to expedite and facilitate business, and as the result of this development of expeditious methods the amount of business which can be put through in a short time is almost inconceivably large. On a busy day in a large stock or produce exchange millions of pounds' worth of shares or goods may change hands in a few minutes. The mainspring

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of the whole system therefore is the necessity of doing business quickly and at the same time safely, that is to say without uncertainty as to the business done, which would lead to disputes and litigation.

The broker's position.

In the first place, then, it is part of this policy that the privilege of trading on the Stock Exchange is confined to certain members who are carefully chosen because they are believed to be reliable men, and who are required to lodge securities for large sums against the possibility of their being unable to meet their obligations to their fellow members. For it is the essence of the stockbroker's position that while he is really acting for some one else, by whom he is merely paid a commission, in dealing on the Exchange for his clients he is personally responsible to his fellow brokers for the due fulfilment of the contracts of sale or purchase made by him on behalf of his clients. Under no other system could the business of the Exchange possibly be carried on with the desired speed. It would be impossible to carry on business with the necessary rapidity if on every sale the seller had to be furnished with the buyer's name, and then had to consider whether the proposed purchaser would be good for the price. The market might be up or down several points before he had time to make up his mind, and then it would be too late to reject the bargain. If the bargain is to be closed immediately by the mere calling out of a price and a wave of the hand as acceptance, the seller must have a guarantee that the purchaser is good, and such a guarantee can only be given by implication by the buying broker. Thus every broker is dealing on the Exchange practically as a principal, and takes upon himself the whole responsibility for all his clients' obligations.

The Settlement.

Again, the same necessity for rapid operation and the enormous turnover of the Exchange is partly responsible for the system of periodic settlements. Shares may be changing hands at various prices from hour to hour and from day to day on the Exchange, and it was therefore found necessary, instead of carrying out and settling each transaction separately, executing

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a formal transfer of the shares and paying over the price, to have one day every month, or oftener, upon which all the transactions during the previous month would be settled simultaneously, the shares being transferred direct from the first seller to the last buyer. An elaborate system has grown up on the lines of the Bankers' Clearing House for entering up the credits and debits of each broker and settling the accounts between them at each of these periodical 'settlements', as they are called. See p. 94.

Punctual payment on the fixed settlement days is absolutely essential. If a broker does not meet his obligations, he is posted as a defaulter. These periodical settlements have therefore the further advantage of keeping the brokers advised (to a certain extent) of the position of their fellows with whom they are dealing. If there is anything wrong with a broker's financial position, it should be at once revealed by his failure to meet his contracts at the next settlement.

Borrowing on securities.

But it is not always possible for brokers or their clients to take up their purchases promptly on the settlement day. A system has therefore been developed under which those who require to borrow money in order to pay for their purchases can do so. Thus banks grant loans to their own clients, whether brokers or private persons, on the security of shares deposited with the bank. The customer must find a certain amount of cover, that is to say, he must pay part of the price of the shares himself, borrowing only part from the bank, so that the value of the shares lodged as security exceeds the amount of the loan. If the shares fall in the market, the bank will call on the borrower to provide more cover, in other words, to pay in a sum to reduce the loan, or lodge further securities, thus preserving the margin between the value of the shares and the amount of the loan.

Contango brokers.

But as the banks can only do a limited amount of this business, a special class of brokers has grown up on purpose to do it. They are called contango brokers, and are practically pawnbrokers of shares. If a stockbroker cannot pay for his shares, he borrows money

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from a contango broker, who takes up the shares, or carries them over, as it is called, for the actual purchaser till next settlement. The charge made for doing so is really interest on a loan, but it is called the contango rate, or carry-over rate.

Speculating on differences.

Unfortunately, the facilities thus provided for genuine investment business have led to the development of an entirely different class of business which is less desirable. This is speculation, buying and selling shares, not with the intention of holding them as an investment, but simply in hope of turning them over again at a profit. The contango system has enabled people to enter into this kind of business on a large scale, because, as they can borrow the greater part of the price, they are tempted to buy a larger number of shares than they could possibly pay for. This has given rise to the system known as speculating on differences, which means buying shares which one does not want to hold, and cannot possibly pay for, in the hope of being able to re-sell them soon at a profit, or selling shares which one does not possess in the hope of being able to buy in again later on at a lower price.

'Bull' and bear'.

The former is what is called a 'bull' transaction, the object being to force up the price of shares, the latter a 'bear', which has the reverse object. Were this process confined to one settlement it would not do very much harm, but when, owing to the carry-over system, brokers are enabled to carry on open speculative accounts from month to month, it leads to considerable mischief and artificial movements in the prices of shares which are due to manipulation by interested speculators. Many of the brokers themselves make a business of speculating in this way on their own account, as well as for clients, and it is in this kind of business that fortunes are made—and lost—on the Stock Exchange.

Its economic position.

It is difficult to see any real economic advantage to the community in this kind of transaction, but, unfortunately, it is hardly possible to restrict or prevent it without interfering too much with the necessary liberty of genuine investment business.

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A Produce Exchange,—Cotton.

The principles upon which the business of a highly developed produce exchange is conducted are practically the same as those of the Stock Exchange. The Liverpool Cotton Exchange may be taken as an example.

The first step in the development of a wide market for any commodity is the adoption of a system of grading so that the goods sold may be easily described and recognized with certainty, without the actual inspection of the goods themselves, or even of samples. Thus different kinds and qualities of cotton are graded by certain well-known names, so that if one wishes to buy or sell, the particular goods offered can be described to a nicety and the price fixed accordingly. In the event of any dispute arising as to whether the cotton supplied is of the quality described, experts acting as arbitrators between the parties examine it and give a final decision. This system enables transactions to be put through by letter or cable between parties far apart and in the shortest possible time, so that the volume of business done is enormous, and the identity of price, which is the essence of a market, is secured and maintained.

Grading system.

Spot sales *v.* futures.

Cotton may be bought and sold either for immediate delivery, known as 'spot' sales, or in the form of 'futures', that is to say, contracts or sales ahead, which may either represent actual future requirements or merely speculative purchases. The economic position of such speculative dealings in actual commodities is less indefensible than in the case of stocks and shares. Under modern conditions, anticipation of future needs is the essence of business enterprise. Every manufacturer must make goods for a future demand, which it is his business to estimate accurately. It follows that, as he is dependent on the future selling price of his goods, he must consider the probable future price of his raw materials. The considerations upon which the future price of cotton depends are very complicated, involving both the future supplies and the amount of the future demand, and the increasing specialization of modern business has led to the development

Advantage of skilled anticipation.

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of a class of experts who devote themselves entirely to the study of these conditions. The intelligent anticipations of these experts serve a useful purpose, because by raising or lowering the present price in view of the future conditions which their experience enables them to foresee, they can actually modify the present market conditions so as to mitigate the future fluctuations. Thus a cotton broker, foreseeing a short supply from the next crop, raises his price, thus tending to check the present demand and spin out the supply as far as possible to meet the expected shortage. Without such skilled anticipation the present demand at a low price might exhaust the supply, causing a sharp rise in price later on when the deficiency of the crop manifested itself in a short supply. Thus, anticipation tends to check the fluctuations of price, which are bad for trade.

Unfortunately, the theoretical advantages of the system are considerably diminished by the entrance into the market of outsiders who, not having the expert knowledge of the real dealer, merely gamble in futures. The fixing of price therefore becomes more or less of a contest between these two classes, in which needless to say the skilled expert generally scores.

MARSHALL, *Economics of Industry*, Book V, chap. i.
JEVONS, *Theory of Political Economy*, chap. iv.
WITHERS, *Stocks and Shares.*

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CHAPTER IV

THE FUNCTIONS OF MONEY

The functions of money.—Its evolution.—How the precious metals came to be chosen as money.—Their advantages.—Development of the modern form of coinage.

So far money has been referred to in broad terms as the means or medium of exchange. It is necessary now to analyse its functions more carefully and in fuller detail. These functions may be described as threefold, thus:

Medium of exchange.

(1) Money is the means or medium of exchange. It breaks up barter into sale and purchase. Goods instead of being exchanged directly for other goods, are exchanged for money, which again is exchanged for other goods. Money thus becomes the universal third commodity for which all goods are exchanged.

Common measure of value.

(2) As everything is exchanged for money, money becomes the common measure or common denominator of value. Thus exchange value becomes price, which is simply exchange value expressed in terms of money.

In order to fulfil these two functions properly, the essential quality of money is that it must be universally acceptable, because its value depends on common consent to accept it in payment for goods, that is to say, to give goods in exchange for it. Every one is willing to take money in exchange for his goods because he knows that others will in turn be willing to take the money in exchange for their goods. Hence Walker's[1] definition of money as 'that which passes freely from hand to hand in full payment for goods, in final discharge of indebtedness, being accepted equally without reference to the character or credit of the person tendering it, and without the intention on the part of the person receiving it, himself to consume or

Universal acceptability.

[1] *Dict. Pol. Econ.* 'Money.'

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enjoy or otherwise use it than by passing it on sooner or later in exchange'.

Store of value.

(3) Money is also the standard of deferred payment or register of debt. All contracts or obligations implying an undertaking to be fulfilled at a future time are usually expressed in money values though in reality they relate to goods or things of value. Thus if a manufacturer borrows raw materials to make into goods, and is unable to pay for them until later on, his obligation is not to return an equal quantity of raw materials at the period fixed, but is expressed in terms of an obligation to pay a certain sum of money, based on the present money value of the raw materials borrowed.

Stability of value.

The one quality essential to enable money to fulfil this function properly is stability of value. If the value of the money changes in any way during the period of the loan, it is obvious that either the creditor or the debtor will be prejudiced by the change.

The process of evolution by which men have gradually come to choose what are known as the precious metals to fulfil these functions of money is most interesting, not only as a piece of the history of the development of civilization, but also as showing how the character and functions of money itself have been developed. Thus the use of money as merely a means

Primitive means of exchange.

of exchange is comparatively a late development. At first the thing accepted in exchange was necessarily some commodity which possessed intrinsic value, though it might happen that it was something for which the receiver had no personal use at the time. But he knew that he would want it later on, or that when he wanted something else he would easily be able to exchange it for the things he wanted, because this particular commodity which he had received in the first exchange was generally desired by other people. Thus one can imagine a total abstainer being willing to accept payment of his goods in bottles of whiskey, for which he has no use himself, because he knows that when he comes to require other goods, the whiskey commands a certain value in the eyes of most men

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which will make them accept it in exchange. But one could hardly imagine the use of such a means of exchange in a community of total abstainers. The idea of regarding the medium of exchange as only a means to an end, and therefore not requiring any intrinsic value in itself, as long as people even by mere convention are willing to accept it because every one else is willing to do so, is the highest development of the modern use of money, and is the basis of the theory of the value of paper money and other forms of money which are in themselves entirely worthless.

The highest development.

At first, then, men naturally chose for the means of exchange something familiar and generally recognized as useful or desirable in itself. Thus among primitive savages shells would naturally appeal to them as money, because if they did not require to re-exchange them at once, they could in the meantime employ them as ornaments by hanging them round their necks, and so get some use out of them. A similar idea lies at the root of the practice in India of investing spare funds in the purchase of silver bangles and ornaments for the women folk. The same idea may be recognized in the purchase of diamonds in the west. The money is put to a good use in the meantime, and it is there immediately convertible into other forms of goods when necessity arises. Instead of getting interest on it from the bank, one gets the use of it in the form of ornaments to be admired in daily use.

Value in use.

Among early nomadic tribes cattle, sheep, and other animals were a natural form of means of exchange because they were universally desirable, and also for another reason because they were self-portable as it were; when the tribe moved from place to place the 'living money' moved with them, and even served to carry their other forms of movable wealth, their various goods and chattels. Many other things have been recorded as the accepted means of exchange, such as rice in parts of India, cacao among the aboriginal Mexicans, oil in the Ionian Islands, rock salt in Abyssinia, wampum money in the early days in New England, tobacco in Virginia and Maryland,

Early forms of money.

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tea blocks at the old Russian fairs, dates among the tribes of Northern Africa, beaver and sealskins in Arctic regions, and so on, all of them being articles which in the first place possessed intrinsic value. It was for the same reason that metals were first employed as the means of exchange, for metals were at first among the most precious things available to semi-civilized races. The early use of copper in Egypt, for example, which it is said was indeed the very mainspring of the rise of the earliest Egyptian civilization, would naturally suggest the use of copper articles or ingots as a most convenient medium of exchange, a commodity always desirable and of great use in itself. From these early days the choice of metals as money has become universal, the only change being that as the baser metals, so called, became more common, the choice has gradually risen to those metals of higher value which have come to be known exclusively as the 'precious' metals, namely, gold and silver. It must be remembered, however, that these are not by any means the most precious metals, and it is therefore necessary to consider why they should have come to be so universally adopted as the best material for coinage.

Early use of metals.

Precious metals.

Their first advantage lies in the fact of their universal desirability, which is due to their intrinsic beauty, and the multiplicity of their possible uses as ornaments and otherwise. But another reason for their value is their comparative scarcity, and an interesting way of realizing this is suggested by considering whether, setting aside their modern relative value, gold is really any more beautiful or more desirable in any way than silver. As a matter of fact it is doubtful whether gold always was more valuable in men's eyes than silver, and it is easy to imagine that in a country like Southern India, where in the old days gold was comparatively plentiful but there was no native supply of silver, a traveller arriving with a stock of silver for sale would easily have been able to obtain more than an equal quantity of gold in exchange for it. But in modern times the world's supply of silver is so much greater than that of gold,[1] and the cost of production of

Their value.

[1] See Table I in the Appendix.

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silver is so much less than that of gold, that gold has without any difficulty achieved the higher position, and is likely to retain it. But another aspect of the question is shown by the fact that other metals still more precious than gold have been tried as the basis of metallic money, especially platinum in Russia during the nineteenth century, but without success. What then are the peculiar qualities of gold and silver which have made them so outstandingly desirable as the raw material of the world's money supply? They may be tabulated as follows:

(1) Facility of transport or portability, because they possess large value in proportion to their bulk and weight, hence their value differs little from one place to another, because the cost of carriage is comparatively small. The price of gold therefore is roughly the same all the world over, because if its supply were excessive in one country and deficient in another it would very quickly be carried from the one country to the other. Thus the value of gold at the mine in South Africa is only a comparatively small fraction less than the value of refined gold in London, because the cost of refining it and forwarding it to London is only a trifle compared with its total value, which is nearly £4 per ounce. Even silver of course compares very unfavourably with gold in this respect, so much so for example that in many of the United States silver dollars are not in use at all, though they are the principal coin of the country, but are replaced in actual currency by paper dollars. It would be intolerable to have to carry about any large sum in silver. Portability.

(2) Durability. Hence the value of gold varies very little from time to time. Gold does not depreciate e.g. by rusting, though kept for an infinite time. It is therefore very desirable for use as ornaments, and ancient Egyptian ornaments made of gold are in existence to-day which are six thousand years old, and are in almost as perfect condition as the day they were first worn. For the same reason gold and silver are the most desirable forms in which to keep treasure from one age to another, especially gold, which under proper conditions does not even tarnish with keeping. Durability.

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Durability is very important for another reason. Gold, once it is found is not consumed, like wheat for instance. It remains more or less permanently in existence, though in the case of ornaments and coinage a certain proportion of its weight is gradually lost by wear in use. But on the whole, gold once brought into the world remains available for permanent use, with the result that each new supply is added to the existing stock, and the sum-total is constantly increasing. This has been expressed by saying that the world's supply of gold is a stock not a crop, and this is of the greatest importance in reducing the tendency to fluctuation in value which would result from variations in the supply if that were dependent upon the annual production. If wheat, for example, were used as money its value would vary enormously from year to year, according to the amount of each year's crop. But with gold it is not so; the annual output though now very large is small compared with the accumulated total which remains from all the world's production throughout past ages. The annual production of all the goldfields in the world is now about twenty-three million ounces (troy) of fine gold, worth nearly a hundred million pounds sterling.[1] Probably from one-half to two-thirds of this goes into coinage every year.[2] But the total amount of gold in existence in the world as coin and bullion is estimated at over two thousand millions sterling,[1] so that the annual addition to the stock is less than five per cent. of the total. If the annual crop of gold were doubled it would only make a difference of four and a half per cent. per annum in the world's stock, which is of course considerable, but nothing at all compared with what the effect would be if the world were dependent on its annual supply of gold for its whole requirements.

World's gold supply.

Uniformity.

(3) Identity of quality. There is no necessity for sampling, grading, or description of the quality of particular lots of gold, as in the case of wheat, cotton, or other goods. All pure gold is the same, and it is only necessary to ascertain the standard of the metal, in other words the proportion of alloy to pure

[1] See Table I. [2] See Table II.

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gold (for gold is scarcely ever handled in the absolutely pure state), in order to be able to state its exact value. There is no difference of quality between different samples of gold from different countries. All pure gold is the same.

(4) Difficulty of counterfeiting. Imitations of gold are easily detected by a very simple and infallible test, and the exact ascertainment of its standard by assaying is comparatively easy. Difficulty of counterfeiting.

(5) Gold and silver are very easily handled from the point of view of the mechanical difficulties of producing a good coin. They are easily melted down, beaten, rolled, or drawn out into thick or thin sheets, pieces, or wires. In technical terms they possess great fusibility, ductility, and malleability. They are also almost infinitely divisible. A piece of gold can be beaten out into a layer so thin that it would be blown away by a breath, and this foil may be cut up into the most minute pieces, yet the whole thing can be brought together again and melted down into an ingot of the original weight. Compare this with a diamond, for example, the value of which disappears completely when it is cut up, or with the difficulty of handling harder metals such as platinum. These were found so difficult as coinage material that they finally had to be abandoned even by Russia, which had the advantage of producing the metal in her own country, and made great attempts to introduce their use. Mechanical advantages. Divisibility.

(6) Stability of value. In this respect it will be found that the precious metals are far from perfect as a means of exchange, yet they are probably much better than anything else yet discovered. The comparative scarcity of gold prevents its value being completely demoralized by great discoveries, and even if such were made, it is doubtful whether the cost of production would be very much lower than at present. Of course, if some chemical process of making artificial gold could be discovered which would produce tons of gold out of some inferior substance it would completely destroy the value of the invention by depreciating the value of gold through its super-abundance; but it is a striking fact that though nothing in the Stability of value.

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world's history has led to greater effort from the earliest times than just this search for the philosopher's stone, not the slightest success has rewarded all these efforts. The world is still dependent for its gold supplies upon the hard won product of the miners in countries which are all distant from civilization and mostly very inhospitable, and the cost of getting it out is high in human life and sacrifice, as well as in mere labour and machinery. The cost of production of gold is therefore likely to remain fairly high; and by one of the peculiar compensations of economics the very fact of an excessive supply of gold serves to some extent to increase the cost of production of further gold, and so tends to check the increase of the supply. To explain this fully involves anticipating the argument of the next chapter, so that it must suffice at the present stage to say that the general effect of an increased supply of gold is to raise the prices of all kinds of commodities throughout the world; this inevitably affects the prices of machinery and human labour and all the other essentials which go to make up the cost of production of more gold and makes it less profitable to produce gold. Thus the increased supply of gold tends to check itself; but this influence must not be regarded as of any great importance, because it only affects the supply of gold and that very slightly. The other influences which affect the value of gold are of much greater weight than its cost of production.

Cost of production of gold.

It is again a matter of great historical and social interest to trace the gradual development of the modern form of coined money which is so generally adopted throughout the world, for there is really astonishingly little difference between the chief types of coins in use in all the different countries of the world. Most of them are round and flat, covered with designs or lettering, and with milled edges, except in the case of coins of inferior metal. What is the explanation of the universal adoption of one common form?

Evolution of coinage.

At first the precious metals were used in the form of ingots or small pieces of the metal, which had to be assayed and weighed in order to ascertain their value, a very cumbersome

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process. Then the practice grew, probably among merchants travelling about the then known world from fair to fair, of making their ingots of a fixed standard of fineness, and putting private marks upon them. Those who knew the merchant's mark and had confidence in him, only required to weigh the ingot; they could take its standard for granted. It is interesting to note that in many cases these primitive coins bore a distinct resemblance to certain articles or commodities which had formerly been in customary use as means of exchange. Thus we find traces of small images of oxen in gold apparently in use as means of exchange in Egypt, and in China there were knife coins, which recalled the previous use of knives as the medium of exchange. It is hardly possible to draw any hard-and-fast line between these primitive ancestors of the idea of coinage and the first of what would be called coins in the modern sense of the word, for the process was not one of invention so much as of evolution. The small bean-shaped ingots, bearing one or more punch marks in the side, which were in use among the Lydian kings as early as 700 B.C. and probably also in China about the same time, are just the last stage before the emergence of the real coin. The first coins in the modern sense of the word were probably the early Greek coins such as those used by the Greek merchants in Naukratis in Egypt in the seventh century B.C. These were round and flat, and bore representations or symbols of the gods in high relief upon both sides. The later Greek coins in Egypt, especially those which bore the head of Alexander the Great, though these were not issued till after his death, were of extraordinary beauty, and the whole coinage of the Greek and Roman periods in Egypt provides an epitome of the history of the various rulers of the country in those days, Greek and Roman. Gradually they were working up to the modern form of the coin, and indeed the only thing they did not use in their coinage, which may fairly be claimed as a modern invention, was the milled edge. Their coins had a bevelled edge which served the same purpose; it enabled any one handling

Marked ingots.

Early Coins.

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the coin to see at a glance whether it had been much worn, or had been clipped or interfered with in any way. For that is the whole secret of the modern coin; its object is to make it impossible to subtract anything from the metal content of the coin without the fact being immediately patent. That is why the coin is covered with designs over almost the entire surface of both sides, and the edge milled; the least attempt to scrape or rub off any of the metal must interfere with the design or the milling and be shown up at once.

Object of a Coin.

The final stage in the history of coinage is its adoption by the government as its exclusive business, for coinage has from very early times been regarded as the privilege of the government. Thus the government steps in and takes over the making of the coins, marks them with its own mark, generally the portrait or superscription of the sovereign, and fixes the weight and standard of fineness of the gold contained in the coin, at the same time fixing the value of the coin accordingly, and making it legal tender, that is to say, making its acceptance compulsory.

A government monopoly.

Hence Jevons's definition of a coin is *An ingot of which the weight and fineness are guaranteed by the government, and certified by the integrity of designs impressed upon the surface of the metal.* Its universal acceptability is now based upon the order of the government, not upon the mere consent of the people to accept it, though that was originally based upon the intrinsic value of the coin. But the government has merely set its seal upon the convention already established by custom, and it remains to be seen later on whether the sanction of the government has in any way altered the real value or authority of the coin.

GIDE, chap. iv. 1.
JEVONS, *Money*, chaps. iii-vii.

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CHAPTER V

THE QUANTITY THEORY OF MONEY

The value of money is its purchasing power.—Quantity theory of money.—Variations of its purchasing power or general level of prices.—Index Numbers.—The meaning of Money.—Metallic money with full intrinsic value, Token money, Paper money, Bankers' money, and the Credit system.

BEFORE going on to deal more fully with the qualities and requirements of metallic coinage, and how it fulfils the functions of money, it is necessary to consider certain general questions affecting the position of money as the result of these different functions, especially the second, the common measure or common denominator of values. If, as already explained in previous chapters, all goods are, under a 'money economy' as it is called, exchanged not directly for each other but in the first place for money, it is natural to expect that some relation will be set up between the total amount of goods in existence at any given time which must be exchanged for money, and the total amount of that money which is available at the time to carry out the necessary exchanges. If there is a certain quantity of goods which must be sold for money, and there is only a certain amount of money available to buy them with, then obviously the price of the goods, that is to say the amount of money obtainable for each commodity, will depend on the relation between the amount of money and the quantity of commodities. If there is plenty of money and not very many of the goods, each commodity will exchange for a large quantity of money, in other words it will fetch a high price; but if there is little money and a great many goods the price of the goods

Money and prices.

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will be very low. This is no new theory, but simply another application of the ordinary theory of value, namely, that the value of anything depends on the quantity of other things one can get in exchange for it, which depends as a rule on the relative quantity of the two commodities awaiting exchange. Obviously the same rule ought to apply to the case of exchange between commodities in general and the one commodity for which they are all exchanged, namely money. The value of money then, like that of everything else, should depend on the amount of it, or on supply and demand.

Theory of value.

In the first place, however, it is necessary to make clear what is meant by the value of money. The value of any other commodity is expressed by its price, which is its exchange value in terms of money. That of course is not its real value, but merely a method of expressing its value in terms easily understood and comparable with those of other commodities. But obviously the value of money cannot be so expressed. One cannot express the exchange value of anything in terms of itself. The price of money—its exchange value expressed in terms of money—is an absurdity, which conveys nothing at all. To find out the value of money one must therefore do as in the case of other commodities, go behind the price which is merely the expression of their value, to the real value behind that price. The real value of any commodity is the quantity of other goods for which it can be exchanged. So it is with money: the value of money is the quantity of other commodities for which it can be exchanged, but as all other commodities can be exchanged for money, it is more convenient to say that the value of money is its purchasing power. Now the purchasing power of money obviously depends upon the general level of prices; if prices of all commodities are high it means that a certain amount of money will not go so far in the market as it would if prices were lower. What then is it that regulates the general level of prices, and so controls the purchasing power of money?

Value of money.

As already stated, the value of money is like everything else

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in that it depends on the supply and demand. The supply of money consists in the first place of the quantity of metallic coinage which is in circulation as the medium of exchange. It will be seen shortly that that is by no means a complete definition of the money supply, but it may serve the purpose in the meantime. On the other hand, the demand for money is only measurable by the number and value of the exchanges which have to be made of goods for their prices. Obviously this depends primarily on the quantity of the goods concerned, and so it may be generally stated in the meantime that the demand for money depends on the quantity of commodities produced which require to be exchanged for money. Putting these two together we arrive at the definite statement of what is known as the Quantity Theory of Money that *the general level of prices depends on the amount of money in circulation; it varies with the relation or proportion between the total amount of money in circulation and the total amount of goods or commodities in existence which must be exchanged for that money.*

Quantity Theory of Money.

Notice next that theoretically it does not make any difference to any one whether the general level of prices is high or low. Money is only a means to an end, the exchange of goods for each other, and theoretically it does not matter how much of the money is used in the double exchange; what really matters is the amount of each commodity exchanged, that s to say, the relative value of the two commodities compared with each other, regardless of the standard of comparison used. Thus if it is necessary to know which of two men is the heavier, it does not matter whether their weights are measured in terms of pounds or kilograms. The unit of weight used will not affect the relative weights of the two men. In the same way it may be said that the general level of prices is of no importance to any one, because it makes no difference in the real values of commodities. A general rise or fall in prices theoretically makes no difference.

It may be well to point out here a very common confusion of terms. It is customary to speak of a general rise in values,

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Prices *v.* Values.

when people say that the value of everything is rising. But a rise in the value of everything is a contradiction in terms, because value is only relative, it means that one thing is worth so much more or less of another. If then the value of one thing rises it must mean that the value of something else in respect of that first commodity has fallen. Both cannot rise at the same time. The confusion arises from the fact that the *prices* of two things may both rise; but that does not affect their values in relation to each other, which remain the same. If the one was worth two of the other before, and the prices of both are doubled, the one will still be worth two of the other. What is really meant by those who speak of a general rise in values is only a general rise in prices, which is not the same thing at all. A general rise in prices means that the value of everything *except one* has risen. That one is gold or money. It means that the value of gold, which is its purchasing power, has fallen, while the value of all other commodities in terms of gold, which is their price, has risen. A general rise in prices means that the amount of gold for which other commodities can be exchanged has risen. One gets fewer commodities no for the same amount of gold: in other words, the value of go has fallen.

Theoretically therefore the value of gold makes no difference to any one, because it does not matter to the world whether the general level of prices is high or low; but what does matter is the process of rising or falling of the general level of prices, that is to say, the change from one general level of prices to another. Theoretically again even this should not matter if all prices rose or fell simultaneously and proportionately all round, because no one would be any the worse or the better. But that is just what they never do. Owing to various causes, which may be summed up in the term economic friction, there are always some people who suffer in a period of transition because they are less able to defend their economic position. It takes time to make changes, existing contracts must be carried out till they expire, customary prices and rates of

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wages are very slow to change, even when it is clear that other things are changing, and the result is that there are always certain classes who tend either to gain or lose by a change in the general level of prices. For example, such a change affects the relative positions of debtor and creditor, because it means a change in the value of money during the period which elapses between the granting of the loan and its repayment. If a manufacturer borrows £1,000 to put into his business to be repaid ten years later, the only thing he can do with the money is to buy with it something which he requires for his business, say raw materials, and these are in due course manufactured and sold as finished goods, for which he receives a certain price. At the end of the ten years all prices have risen, including those of the manufacturer's commodities. As the time for repayment approaches he must sell £1,000 worth of his goods to pay his debt, but owing to the rise of prices he will not require to sell so many goods now as he would have sold for £1,000 ten years ago. Fewer goods will therefore pay his debt now than he was able to make out of the original sum borrowed. He has gained by the rise of prices, because the value of the money repaid is lower than the value borrowed, though the sum is the same. The value of money has fallen. When prices fall the position, of course, is just reversed. Thus rising prices are good for debtors, and bad for creditors, and *vice versa*. In the same way the change in the purchasing power of money obviously affects all people with fixed incomes, or those whose rate of remuneration is fixed by custom and is slow to change. Thus the wages of the workers and the salaries of the middle and professional classes are very slow to move in times of changing values, and these classes gain greatly by falling general prices and lose by rising prices. Their real income moves in proportion to the rise or fall of prices in general, but in the opposite direction. This, for example, is being very seriously felt by all classes just now, owing to the rapid rise of prices especially since the war. In England in January, 1917, a sovereign would only buy as much as could

Effects of changing prices.

Debtors and creditors.

Fixed incomes.

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have been bought for about 10*s.* 6*d.* before the war. In two and a half years prices had risen 93 per cent. (See Table VI.)

What matters, then, is not the actual position of prices, but the movement up or down of the general level of prices, and in modern times great attention has been paid to evolving methods of calculating the rise or fall in the general level of prices. For obviously it is not easy to say how the general level of prices is moving when many items are going up, but some are steady, or perhaps even going down. The method now in use is known as that of Index Numbers. A large number of commodities in general use being selected, the price of a certain quantity of a particular quality of each commodity is ascertained, and the total of all these prices is taken. Later on, say at intervals of a month or a year, the price of the same quantity of the same quality of each of the commodities is again taken, and the new total is compared with that formerly recorded. The difference is generally represented as a percentage, and this indicates the movement of the general level of prices. There are of course many different methods of calculating Index Numbers, and many intricate points of detail to be considered,—for these, reference must be made to a special text-book,—but the general method is the same, and the results are always very similar. There are three main Index Numbers much used in England, namely Sauerbeck's, published in the *Statist*; that of the *Economist*, published monthly; and the Government Index Number, which is prepared by the Board of Trade. It is interesting to note the general effect indicated by them all, as shown by Table V in the Appendix. Since 1873, for example, they provide illustrations of both a great fall and a great rise in the general level of prices. From 1873 onwards prices for over twenty years fell very rapidly, and on the whole steadily, till about 1896, when a change began which has recently become very marked. Thus the Board of Trade Index Number which was 151·9 in 1873 fell to 88·2 in 1896, and has since risen again, till in 1913, the last year before the war, it was 116·5. Since the

Index Numbers.

History of prices.

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war the rise of prices has been very severely accentuated, but for reasons which are not altogether within the scope of the quantity theory of money.

Of the two evils of falling and rising prices the former is probably the worse, because a general fall of prices causes great depression of trade, and introduces an element of uncertainty into the calculations of the manufacturer which is most injurious to trade. On the other hand, a steady rise of prices while it encourages trade is apt to lead to over-activity, undue inflation of prices, and speculation which generally ends in a collapse and a financial crisis. Further, the effect of a serious rise of prices upon the wage-earning classes and generally upon those whose economic position is weak, may be very disastrous by cutting down their standard of living, which is already too low, and reducing them to a condition which is not merely a disgrace to humanity but is also a positive menace to society in the fact that it produces conditions under which vice, crime, and disease flourish.

Falling and rising prices.

What is wanted above all things is neither rising nor falling prices, but steadiness of the general level of prices, that is to say stability of the value of money, and that is just where the world's present monetary system falls short of perfection. Herein lies the answer to the question propounded in the first chapter as the main thesis of this book; the system of money prices does, in times of transition from high to low prices or *vice versa*, produce an actual distortion of values through inequality of the rate of movement of prices of different commodities. If one class of prices (and it must be remembered that prices include wages or incomes) is rising rapidly, while another remains steady or rises slowly, then the relative value of these commodities or services is being altered by the changes of our monetary system. The quantity theory of money is therefore the essence of the whole question round which this book revolves, viz. the mechanism of exchange and its effect upon values. It becomes necessary then to inquire more fully into the quantity theory and the line of this further inquiry

Distortion of values.

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may be indicated as follows: According to the theory the general level of prices depends on the quantity of 'money' in circulation. But there are many different kinds of money in use in the world, and metallic money, especially gold, is only a very small proportion of the total. It must not be assumed therefore that the quantity of *metallic coinage* in circulation, still less the quantity of one particular coinage, say gold, has any direct and *proportionate* effect on prices. In the first place we have no definite knowledge of the amount of gold coinage in existence in the world. All we can do is to take the totals of certain known stores of gold e.g. in certain banks and State treasuries, and estimate the rest. Again our information as to the world's annual supply of gold is fairly accurate, but we have no very definite information as to how much of that is used for coinage purposes and how much for other uses, such as gold watches and ornaments; that side of the demand for gold can only be estimated.

Quantity of 'money'.

But even if we had exact information as to the quantity of all the different metallic coinages in circulation in the world we should still be very far from being able to apply the quantity theory with any approach to definiteness, because there are so many other things to be taken into account. Suppose for example that in one place or country, owing to the development of the conveniences of exchange, the concentration of markets, and the habits of the people, the turnover of trade is very much quicker than in another district, so that the same piece of money performs many acts of exchange in the course of a day passing rapidly from hand to hand. Obviously from the point of view of the quantity theory that will have just the same effect as if there were many pieces of money each of which merely passed from one hand to another and remained in the possession of its second owner all day. This then points to the question of 'rapidity of circulation', which is a factor of great importance in the effective amount of money. Again, there are many different kinds of money, all of which require to be taken into account in discussing the quantity of money. First of all there is the

Rapidity of circulation.

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standard coinage of the country, usually gold nowadays in most countries, which possesses full intrinsic value, that is to say it would be worth as much at a goldsmith's shop as a piece of bullion as it would be in any other shop in exchange for goods. But there are also many other kinds of money which are called generically 'token money' which possess much less intrinsic value than their face value, such as silver, nickel (in every country except England), and copper. These as most people know are not worth, as metal, nearly their full legal value as coins, yet they pass current every day at their full face value without question. In other words, it has gradually been realized that full intrinsic value is not essential to the utility of a coin as a means of exchange, if certain other requirements are complied with, and it will be necessary to consider carefully what these requirements are and how far token money can thus take the place of its more intrinsically valuable companions. Still more startling when the truth is realized is the fact that in modern civilized communities certain slips of paper which are called paper 'money', though they possess no intrinsic value whatever, do as a matter of fact pass current from hand to hand in exchange for valuable goods. They are currency in fact, or money of a sort, and the question of how they perform this apparent miracle and the conditions of their issue, especially as to their amount, must be carefully studied, for obviously if money can be made out of paper to an unlimited extent it is waste of time and trouble to use gold as money, and the amount of gold brought to light in the world every year does not matter at all. Further, bankers and other financial men have gradually brought into use certain ingenious methods of doing money's work without the use of any actual money at all, e.g. by the use of cheques, bank drafts, bills of exchange, and so on, which are all included in the general term 'bankers' money', and these carry us into the mysterious realm of 'credit' which in the modern financial organization of the world means paying our debts by a system of set-off or contra account.

Token money.

Paper money.

But from the point of view of the quantity theory of money

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all these different kinds of money or expedients for doing without money must be taken into account as money of one sort or another, and the question comes to be whether, in view of this enormous mass of 'money' other than gold, it really matters much what quantity of *gold* money is in existence at all. What are all these different kinds of 'money'; how do they come to fulfil the requirements of money as the means of exchange, and what is their relation to real money, that is to say, to the full intrinsic value money which in most countries nowadays is gold only? First, then, it is necessary to consider the essential qualities of a standard coinage, for that is the name given to the full intrinsic value money of any country.

GIDE, Book II, chap. iv, secs. 2–3.
IRVING FISHER, *The Purchasing Power of Money.*
LAYTON, *Introduction to the Study of Prices.*

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CHAPTER VI

THE QUALITIES OF GOOD COINAGE

Intrinsic value and legal tender value.—Right, weak, and strong money.—Free mint and mint price.—Gratuitous coinage.—Brassage and seigniorage.—Gresham's Law.—Token money.

It has been seen in Chapter IV that the adoption of money as the universal means of exchange is the result of custom; it requires the gradual development of a general agreement to accept the coins in payment of debts. Then the government steps in, guarantees the weight and standard of the metal contained in the coins, and compels the public to accept them in payment of debt at a certain value, that is to say, it makes the coins legal tender. This raises a new difficulty. The coin has now two values, (1) its intrinsic value as a piece of bullion, which depends on the market value of the bullion, and (2) its legal tender value, which is fixed by the government.

Legal tender.

These two must always be the same, because if the bullion value is greater than the legal tender value, that is to say, if the coin is strong, it will be melted down or sold by weight as bullion, and the coinage will disappear. If, on the other hand, the coin is weak, that is to say, if its bullion value is less than its legal tender value, then the government is defrauding its subjects by trying to make them accept the coin at a value greater than its real value. The terms 'strong' and 'weak' are preferable to those formerly used, 'heavy' and 'light', because it may happen that the heavier of two coins is actually the weaker on account of the greater proportion of alloy which it contains. The government then must see to it that the coins are kept 'right', that is to say, that their bullion values are always equal to their legal tender values, no more and no less. But it is very difficult to do this. For while the weight

Strong and weak money.

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of a new coinage may be carefully calculated at the time of issue, so that it may be exactly right, yet the bullion value of the metal it contains may change, because the bullion is a commodity which has its market price. This price depends on other considerations besides the demand for coinage, for example, on its use in trade or the arts. Thus the government must either be constantly re-coining and altering the weight of the coinage to suit the changing value of the bullion, which is not practicable; or else some means must be discovered of preventing the fluctuations of the market value of the bullion. This is done by what is called the open or free mint. The government fixes a certain price which it is willing to pay for gold of a certain standard, that is to say, it undertakes to coin any quantity of bullion that the public may bring to the mint into coins at a certain fixed number for a specified weight of gold. For example, the English mint will coin any number of ounces (troy) of gold of twenty-two carats standard, that is to say eleven-twelfths fine, into sovereigns at the rate of 1869 sovereigns for 480 ounces of gold. In other words, the mint price of English standard gold is £3 17*s.* 10½*d.* per ounce (troy).

Free mint.

The price of gold.

It is interesting to notice how this peculiar figure was adopted as the basis of the world's price of gold, for such it has become. The explanation goes back to the very beginnings of the modern history of coinage in the seventeenth century in England. At that time a great change was coming over the opinions of business men and foreign merchants as to the policy to be adopted in regard to the precious metals. In the days before the discovery of America by Columbus the precious metals were becoming increasingly scarce throughout Europe. The supplies had originally come from the East in the times of the Greek and Roman conquests, and these had been gradually depleted by wear and loss until in the period between say the thirteenth and fifteenth centuries every nation in Europe was struggling to obtain and retain for itself a sufficient supply of the coveted bullion. The result was the existence in every

Its history.

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country of a mass of legislation prohibiting under the most stringent penalties the export of any of the precious metals; but the frequency of these enactments in itself shows how inefficient they were to prevent the trade. The discovery of the New World, however, with its enormous supplies of silver and gold changed the whole situation, and gradually men's views on the proper method of regulating the movement of bullion between different countries began also to change. When the East India Company received its Charter on 31st December, 1599, a clause was inserted conferring upon the Company the right to export bullion, and this became one of the chief charges made against the Company in later controversies.

The Mercantilists.

Early in the seventeenth century a strong school arose of men who came to be known as the Mercantilists and who advocated an entirely new view of trade, namely, that the only way to protect the nation's supplies of bullion was to regulate trade in such a way that there would always be a favourable balance of trade, which to them meant an excess of exports. This was looked upon as desirable because it meant that other countries would require to pay for the excess in gold or silver. Thus the Mercantilists, whose views to this day colour the terminology of the foreign exchanges, were in reality not reactionists but advanced reformers who stood for the economic principles of free trade rather than the traditional policy of protection which came later on to be associated with their name. One effect of their arguments was seen in 1663 when England, first of all the world, passed an Act allowing within certain easy limits the free movement of bullion out of the country, and to this, as will be seen later on, was largely due the early supremacy of England in the world's financial affairs. This Act was immediately followed by an entire reconstruction of England's own coinage, which was then in a very bad state. At that time the standard coinage of England, like that of every other country in Europe, was silver; an ounce troy of standard silver contained 11 oz. 2 dwt. of pure silver and 18 dwt. of alloy and was coined into 62 shillings,

The 1663 Act.

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The silver standard.

or in other words the price of English standard silver was 5*s.* 2*d.* per ounce or 62 shillings per pound troy, which contains only twelve ounces. Under an Act of 1663[1] gold coins were introduced which were officially known as 'Unites' or 'broad' pieces, but soon came to be popularly known as Guineas, because they were made from gold brought from the territory of the Guinea Company in West Africa. Forty-four and a half of these new pieces, which were declared to be worth twenty shillings each, were to be made out of a pound troy or twelve ounces of standard or 'Crown' gold, which was to contain twenty-two carats of gold to two of alloy, that is to say it was the modern standard of eleven-twelfths fine. According to this the standard gold would be worth $\frac{£44\ 10s.}{12} =$ £3 14*s.* 2*d.* per oz. This fixed price, however, turned out to be much less than the real bullion value of the new coins in comparison with the silver coins, which to make matters worse were very much clipped and worn, and the new coins quickly showed a tendency to disappear from circulation, being melted down or sold for export at their bullion value. To meet this difficulty the price of the guinea was gradually raised until it finally touched 30 shillings.

The Guinea.

Locke and Newton.

In 1696, England, under the advice of the philosophers, John Locke and Isaac Newton, entered upon a great re-coinage scheme which for a time righted matters again, and the price of the guinea fell to 21*s.* 6*d.*, at which it was officially fixed, thus marking the first step on the part of England (though it was probably unintentional) towards establishing a fixed ratio between the values of gold and silver bullion. But still the price was too high, and in 1717, Sir Isaac Newton being then Master of the Mint, the guinea was reduced to its well-known value of twenty-one shillings, at which it remained as long as it continued to be a part of the English coinage. Incidentally this fixed the modern price of English gold, because if twelve ounces of standard gold were still coined into

[1] See Dana Horton, *The Silver Pound*, p. 229.

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44½ of these coins, which were now officially declared to be worth £1 1*s.* each, then obviously one ounce was worth a twelfth part of 44½ guineas, namely £3 17*s.* 10½*d.* The modern English sovereign, it may be mentioned in passing, was not introduced till 1816, when the guinea disappeared.

Free *v.* gratuitous mint.

There has then been a free mint in England for gold coinage since 1666,[1] but a free mint does not necessarily mean that the government does the work of coinage without any charge. This is called gratuitous coinage, and England is the only country that does so. Most countries charge the cost of coinage, called brassage, and sometimes an extra profit called seigniorage.[2] The latter, however, is very often used to include both the actual cost of coinage and any extra profit that may be made.

Brassage and seigniorage.

The result of the English system of gratuitous coinage is that the English sovereign is the only coin in the world which is absolutely right. A very little consideration will serve to show how the free mint keeps the coinage right. It is obvious that if the government is prepared to buy any quantity of gold at the price of £3 17*s.* 10½*d.* per ounce, no one will sell gold for less than that price. On the other hand, if any outside merchant were to offer more than the mint price he would have such a quantity offered him, sovereigns being melted down and sold to him at a profit, that he would soon cut down his price again. Besides, why should any one offer more than £3 17*s.* 10½*d.* for gold when he can get it at that price by simply melting down new sovereigns? Thus the mint price of gold, which is the same, considering the differences of standard, in all countries, has practically fixed the value of gold bullion all over the world, so that the price never varies more than a small fraction per ounce.

Effect of free mint.

Incidentally it must be explained that as a matter of fact the actual price of standard gold in the London Bullion Market fluctuates round £3 17*s.* 9*d.*, not £3 17*s.* 10½*d.* as already stated. The reason for this is as follows: As a matter of fact it is not the custom in England for any one

The Bank price.

[1] Ibid., p. 230. [2] See Table IV.

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to take his gold to the Mint itself and have it coined on his own account. Though any one is entitled to do that, in practice it has been found more convenient that the Bank of England, which is in reality though not in name the Government Bank, should act as agents for the Mint in receiving bullion for coinage. Any one who has bullion for sale, therefore, instead of taking it to the Mint and leaving it to be coined at their convenience, which would mean a considerable delay, takes it to the Bank instead and receives the corresponding amount of sovereigns at once, or at least as soon as the gold has been weighed and assayed to prove its standard. This is not only a convenience to the owners of the bullion, but it also saves them the delay of coinage, and time means money, because the value of the gold would be just so much uninvested capital while it lay at the Mint waiting to be coined. Though this sounds a very small matter yet it is really quite an important consideration, and the owners of bullion are quite willing to pay for it. The Bank therefore by arrangement pays only £3 17*s.* 9*d.* per ounce or 1½*d.* per ounce less than the statutory price, and this forms at once the remuneration of the Bank for its trouble in the matter and some recompense to the Government as owners of the Mint for their loss of interest on capital. Thus as a matter of fact the Bank has become in a sense an agency of the Mint and the bulk of the bullion lies in the Bank safes uncoined until coinage is required, when it is taken out and forwarded to the Mint.

The Bank and the Mint.

So far then for the gold coinage of England, but the matter becomes much more complicated when it is remembered that every country requires more than one coinage; for example, they must have silver and copper coins as well as gold. Now to fix a mint price for silver is essentially a different operation from that of fixing a mint price for gold, which only means fixing arbitrarily the weight of the standard coin, or the number of coins to be made out of a certain weight of standard bullion. As already pointed out, it was mainly the result of an accident that the present price of gold was fixed, or in

Other coinages.

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other words that 46·725 sovereigns are made out of a pound troy of gold. Had we to begin over again with a new coinage it is probable that an even number, say fifty, would be selected, which would mean that the *price* of gold would be raised to £4 3*s.* 4*d.* per oz., but it would not make the slightest difference in the *value* of gold, that is to say its purchasing power. For it cannot be too often repeated that the mint price of gold is not its real value, but merely its price or exchange value in terms of itself, which of course is not an exchange value at all. The real value of gold is its purchasing power, its value in exchange against all other commodities, and that varies frequently, quite regardless of the price of gold which, being purely arbitrary, remains fixed. It is just the same as if for some reason it were decided that in future there should be only ten inches in a foot instead of twelve; this change of the standard of measurement by increasing the size of an inch would not make the slightest difference in the length of anything, but merely in the terms used to express that measurement. The mint price of gold therefore is merely the result of an arbitrary decision which means nothing and has no effect whatever upon its value.

Value of gold and silver.

The mint price of silver, on the contrary, is a real value, its value in exchange against gold, and through gold against all other commodities. But this exchange value of silver is already fixed by the market according to the forces of supply and demand. To fix an arbitrary mint price for silver is therefore impossible; it must be in accordance with the actual market value. This could be done well enough; but the difficulty is to maintain the price, once fixed, in accordance with the market value, because that market value fluctuates frequently and considerably, and, unlike those of the value of gold, the fluctuations in the value of silver are clearly seen, because they are shown by its price in terms of gold. The price of silver is a real price, its price in terms of another commodity. Thus the fact that the price of gold does not vary, disguises the fact that its value varies, because the

Mint price for silver.

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Fluctuation of silver.

variation is shown in an inverse way by the variation of prices of other commodities. When the value of silver varies, the variation is shown at once by its price in terms of gold, that is to say by the amount of gold which must be paid for an ounce of silver. This has varied for example from $62\frac{1}{16}d.$ per ounce in 1859 down to as low as $21\frac{11}{16}d.$ per ounce in 1902,[1] and in 1916 it rose again as high as $37d.$ per ounce. These fluctuations in the value of silver are even larger and more frequent than those of gold because, in the first place, the supplies of silver are much larger and more variable than those of gold, and, second, because the uses of silver in trade and for industrial purposes form a much larger proportion of the total requirements than in the case of gold. A very large part of the total annual production of gold, say one-half to two-thirds, is bought up by governments for use as coinage or gold reserves; but the proportion in the case of silver is very much less. In the case of copper and nickel a mint price is for similar reasons altogether impossible. The price of these metals is fixed entirely by their value for industrial purposes, and the demand for coinage purposes is negligible.

This, however, leads to a new difficulty. If silver coins are to be legal tender, then they must come under the same rule as gold; their value must be kept right. If not, a still worse complication is introduced: if the silver is allowed to depreciate or become weak, it will cause the gold coinage to disappear out of circulation, and the same would happen in the reverse way if the silver were to become strong, the gold coinage would be relatively weak and the silver being appreciated would disappear. This is called Gresham's Law, viz.: that *of two coinages both circulating freely as legal tender in any country, the weaker always tends to drive out the stronger*; or to put it more crudely, that bad money drives out good.

Gresham's Law.

This is at first sight a very hard saying, but a little consideration will show that it is only natural. The chief purpose for which coins are employed is the payment of debt. If

[1] See Table IV.

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both coinages are invested by law with the power of fulfilling that function, and that is what is meant by saying that both are legal tender, then naturally people will choose the worse of the two for that purpose, in other words, they will give away the inferior and keep the better coin. For the other is better in this respect, that while the two are by law equally good for paying debts, there is another market in which they are not equally good, namely the bullion market or the goldsmith's shop. There the value of the gold is slightly better than that of the silver; in technical terms there is a premium on gold. Obviously then the thing to do is to use the gold coins as bullion and keep the silver for use in those other cases where it is just as good as the gold. The mystery therefore disappears when it is remembered that the disappearance of gold from circulation only means that people are keeping the good coinage and giving away the bad. It is only natural to keep the best. Every one therefore uses the depreciated or weak money for paying debts, and keeps the good money for other purposes where its superior value is realized.

Explanation.

A few illustrations of the circumstances under which Gresham's Law may come into force will make the matter clearer. A very common case is where an old or worn coinage is in circulation and the government decides to replace it by a fresh issue of new coins. Although the new coins are no better than the old as regards purchasing power, yet instinctively every one who receives the new coins tries to keep them. Suppose for example a man takes out a handful of coins to pay an account, he will inevitably and almost without realizing what he is doing, pick out the old worn coins and leave the bright new coins—he prefers to keep them. The result when such a new issue takes place is at first sight paradoxical. Immediately the new issue is made it disappears, but the old worn coins are more in evidence than before, and unless the government calls in the old coinage as fast as it issues the new, the old coins would remain in circulation alone for a long time. This points to

Old *v.* new coins.

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one essential condition of the operation of Gresham's Law; there must be enough of the weaker coinage to supply the currency requirements of the country or the good coinage will not disappear. A certain amount of coinage is required to carry on the daily business of the market, and if there is not enough of one coinage to do that work another will be employed to make it up. Thus as a rule it is only when there is a free mint for the depreciated coinage that Gresham's Law operates strongly, because then the mere fact of the depreciation tends to increase the supply of the weak coinage.

Depreciated silver.

As long as the mint is open it pays to coin the depreciated bullion into coins. This points to the second illustration of Gresham's Law where a depreciated coinage of say silver is in circulation as legal tender along with gold. Here the very fact of the depreciation and the free mint causes further depreciation, because with a free mint it pays to take silver to the mint, have it minted into coins and use these coins in the market to exchange into goods and then into gold which will finally be turned into more silver bullion at its depreciated market value and again coined into legal tender coins at its full face value. Thus the depreciation is cumulative.

Gold in Egypt.

A very peculiar illustration of the operation of Gresham's Law was seen in Egypt after the reconstruction of the coinage system in 1885. Under the old system which was preserved with only slight alterations there were in addition to the nominal standard unit of the coinage, the Egyptian pound, three foreign gold coins which circulated freely in the country as legal tender at certain fixed tariff rates, namely the Turkish pound, the French Napoleon, and the English sovereign. But when the tariff rates of these coins were fixed in the time of Mohammed Aly, the government, probably not understanding the theory of coinage, fixed the tariff value of them all too low, and they graded the tariff in a peculiar way so that the Turkish coin was the most undertariffed of the three, the French next, and the English least of all. Mark the effect of this peculiar discrimination. For many years it did not matter

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much because there was no material quantity of gold of any kind in the country, and whatever did come in was eagerly sought after. But after 1885, owing to a variety of circumstances, a large quantity of gold began to flow into the country, and immediately Gresham's Law came into play, but in a peculiar way. To begin with, there never had been any quantity of the Egyptian pound issued, nor was there now, so that the comparison lay between the three foreign coins. Of these, all were strong, as compared with the nominal standard coin of the country, the Egyptian pound, but the English was least strong, the French next, and the Turkish most of all. The result was that the English was weak as compared with the French and that as compared with the Turkish. In effect then the English sovereign was a weak coin as against two strong and it promptly drove the others out of circulation. If a parcel of French gold coins came into the country it immediately disappeared either back to France again or down to the Goldsmiths' bazaar, where it fetched its full bullion value or at least something nearer it than the fixed tariff or face value, which was all that could be got for it in ordinary shopping. This case again illustrates the necessity for an ample supply of the weaker money to displace the stronger and so do all the work.

The English sovereign.

The most common case in which Gresham's Law can be seen to operate strongly is perhaps that of depreciated paper money circulating as legal tender alongside of metallic money especially gold. As will be seen later on, the War has provided a number of illustrations of this problem which has for so long been one to which most European nations at least were complete strangers.

Paper and gold.

It remains to consider one more point in the working of Gresham's Law, namely, where does the good money go? In the first place it simply remains in possession of whoever is lucky enough to possess it, and rich enough to be able to keep it, that is to say it is saved up or hoarded. If a man wishes to lay up a store of money he will naturally choose the newest

How the good money goes

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Hoarding.

and best coins he can find. Egypt frequently offered a striking illustration of this habit, for when hard times came on and the fellaheen were forced to go to their hoards, it was remarkable how many gold coins turned up in circulation of old dates but in very good preservation. But in countries where people put their money in the bank instead of hiding it in a hole in the ground, the thing works out in a different way. Gold finds its way to the bank, and when the banks require to send money abroad, as they do frequently in payment of a temporary indebtedness of their customers to others in foreign countries, they naturally send the gold, because if they sent silver they would only receive credit for its bullion value, and its face value at home is more than that. Thus silver is kept for use at home and the gold is used to pay foreign debts, and so the good money goes abroad.

Export.

Effect of free silver.

Again, it pays to sell the good money as bullion, and this transaction can be combined with the former in a most ingenious way. As long as there is a free mint for silver in one country the bullion value of silver in that country cannot depreciate to any material extent, and the local value of silver bullion is artificially maintained there. But there is nothing of this sort abroad, with the result that silver is much cheaper there than it is in the country where it can be freely coined into legal tender money. What merchants do, therefore, is to turn all their silver into gold at home at the locally inflated value of the former, send the gold abroad and buy silver bullion with it at its true value, then have this silver coined at the home mint into silver coins at a considerable profit and change these again into gold in the course of trade. The effect is that rapidly all the gold disappears and there is nothing left in the country but silver.

The alternative system.

But it may be asked, why does this never occur in those countries such as England which do as a matter of fact use silver coinage as part of their currency. The answer is very simple. In such countries there is no free mint for silver. The government retains the coinage of silver entirely in its

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own hands, and no one else can issue silver currency nor get silver minted into coins by the government. The government thus makes a considerable revenue [1] out of the seigniorage on its silver coinage but not without incurring a serious responsibility: it must see that it does not issue too much silver or the silver would at once begin to fall in value or, as it is called, to depreciate. To preserve the right balance between excess and defect in this way is no easy matter, for either extreme is almost equally disastrous. An insufficient supply of silver coinage causes great inconvenience and loss to every one who wants change for gold. Naturally the government would not have too little intentionally, because to do so is simply throwing away the opportunity of making the seigniorage out of a further issue. But the consequences of over-issue are so serious that the government must be constantly on its guard against it, and must be ready at any moment to withdraw the surplus if signs of over-issue appear. Yet with all the care possible, mistakes or miscalculations of this kind will inevitably occur even without a free mint for silver, and the risk of over-issue with a free mint would be so serious that the government must take other steps to guard against it. The great danger is that if silver were legal tender with a free mint any depreciation of its market value would tend to drive the gold out of circulation and in a short time out of the country. To guard against this the obvious remedy is that silver must not be legal tender, and that its issue must be retained in the hands of the government; and this, as a matter of fact, is the policy adopted by most Western countries. The silver coinage, and of course the same applies to the nickel and copper coinages, is only token money as it is called, its bullion value is less than its face value and it has only a very limited legal tender, which is from the point of view of economics no legal tender at all. In England, for example, payment in silver can only be legally enforced to the extent of £2, and copper to the extent of one shilling. It follows from the character

No free mint for silver.

Token money.

[1] See Table IV.

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of token money that the mint is closed to the coinage of silver.

This seems quite an easy way of solving the difficulty, but unfortunately it is not so easy as it seems, and in fact it is the cause of one of the greatest economic controversies that has ever raged throughout the world, namely that between the rival systems known as Monometallism and Bimetallism, which will be explained in the next chapter.

GIDE, chap. iii, §§ 4 and 5.
JEVONS, *Money*, chaps. viii–xi.

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CHAPTER VII

BIMETALLISM

The meaning of the question and its importance.—Insufficiency of gold alone for the world's currency requirements.—Instability of the value of gold.—Difficulties of national bimetallism.—The Latin Union and its history.—The position of India and America.—Possibilities of International Bimetallism.

IT is difficult now to realize that the bimetallic controversy once occupied the foremost place among economic controversies throughout the world, so completely has the question apparently fallen asleep in these days. Yet the question still has its interest and its importance not merely as a part of the modern history of currency questions, but because it is almost certain to be revived again some day if the conditions of the world's supply of the precious metals and their use as currency return to anything like their former position.

On the face of it the question does not seem of any great practical importance. Why should the whole civilized world have been divided into two bitterly hostile camps, over the apparently unimportant question of whether silver coinage should be legal tender or merely token money? But though that is all that the controversy amounted to on the surface, its real meaning is something deeper and of much greater practical importance. It involves the fundamental principles of currency and is based on the Quantity Theory of Money and the whole question of the world's currency requirements and how these are to be met. The pivot of the controversy is whether gold alone should be legal tender, or whether both gold and silver should be made equally available for the payment of debt without limit. If the double standard be adopted it follows

The controversy.

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that some fixed ratio must be set up and maintained between the value of the two metals as bullion, this ratio of value corresponding with the relative weight of the standard coins of the two metals and the market value of gold and silver. For it is obvious that if twenty shillings are to be really worth a sovereign, then the weight of gold and silver in the two coins respectively must be so adjusted that the value of the silver bullion in twenty shillings will be worth in the market exactly the same amount as the value of the gold bullion in one sovereign. To secure this permanent rightness of both coins there is only one possible method. The weight and value of the two coins must be fixed upon some assumed ratio of value between the bullion of the two metals, and effective steps must be taken to enforce this ratio permanently upon the actual market values of the two metals. As we have seen, the only practical method of doing so is to establish and maintain a free mint for the coinage of both metals into the standard money at the fixed ratio. Thus the famous Classical Ratio of $15\frac{1}{2}$ to 1, which was finally adopted by France in 1803 and maintained by the Latin Union till 1873, meant that the weight of pure silver contained in 20 silver francs or four five-franc pieces was exactly the same as that of the pure gold contained in 310 francs gold or $15\frac{1}{2}$ Napoleons of twenty francs each, for the standard in France is the same for gold and silver—$\frac{9}{10}$ths fine. For seventy years the countries of the Latin Union maintained this ratio against the gradual adoption of monometallism by the rest of Europe; and it was their acknowledged defeat in 1873, when they were finally forced to give up the struggle and close their mints to the free coinage of silver by the public, that produced the conditions which led to the controversy. The maintenance of a free mint for silver is the crux of the whole bimetallist position.

Double standard.

Monometallism.

The opposite view is that gold coins alone should be legal tender, silver being merely token money like nickel or copper, and that the coining of the silver should be retained entirely in the hands of the government. This is called Monometallism

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or the Single Standard and is the system adopted by England, Germany, Japan, &c., and in effect now also by France and the Latin Union and by India. To understand the importance of the question it is necessary to study the history of the currency conditions which gave rise to it, and to see how the various countries adopted the alternative systems between which the controversy arose.

It has been explained in the previous chapter how England was the first country in the world to allow the free export of the precious metals in 1663, and how the subsequent history of the guinea led England almost unintentionally to fix a tariff or ratio between gold and silver when in 1717 the value of the guinea was fixed at 21*s.*, at which rate it was made legal tender. This was equivalent to a ratio of about 15½ to 1. From this point England gradually and almost unconsciously drifted into the adoption of gold as its chief currency in place of silver. The first definite step was taken in 1774 when it was enacted, owing to the very bad condition of the silver currency at the time, that silver coinage should only be compulsorily acceptable by tale or count up to a limit of £25, this being the first limitation ever placed upon the full legal tender value of silver coins. In 1798, during the Napoleonic Wars which had rendered necessary the suspension of gold payments by the Bank of England, the free coinage of silver at the English mints was suspended. Incidentally the result was that the silver coinage rapidly sank into a very bad state and became so deficient in amount that all sorts of token money were issued by banks and even private individuals, and large quantities of French silver coin were actually brought into the country to supply the deficiency, a very strange expedient considering that it was with France that England was then at war. It was probably the very bad state of the silver coinage and the appreciation of gold, due to this and the suspension of payments, which led men gradually to think of gold as the better coinage. At the same time the increasing wealth of England due to the development of her young

History in England.

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industries was making it necessary to handle a great deal more money in the course of business, and the inconvenience of silver with its low value and heavy weight was being increasingly felt. At any rate the fact is that when, after the war was over, the question of the reform of the currency came up in 1816, it was almost unanimously agreed that gold was the better currency for England in the future, and the Act of that year adopted this view. Under it the gold sovereign became the standard unit of the English coinage; silver was reduced permanently to the subsidiary position of token coinage, its legal tender being limited to £2, and the Mint was not reopened for its coinage. At the same time the bullion value of the silver coins was slightly reduced, for the Act provided that in future sixty-six shillings should be coined out of the ounce of silver instead of the old rate of sixty-two. Thus England definitely and finally adopted monometallism.

Reform of 1816.

The adoption of the Classical Ratio of 15½ to 1 by France is usually given as having occurred in 1803, but as a matter of fact the measure of that year was only the ratification of a previous decision made in 1785 on the advice of Calonne, Comptroller-General of the Finances. From 1803 onwards the history of bimetallism lies mainly with France and her continental neighbours. After the early part of the nineteenth century, especially from 1820 onwards, gold was mainly appreciated, that is to say its bullion value was really higher than the fixed ratio of the French mints. The inevitable effect was that there was a very considerable coinage of silver at the French mints and a good deal of gold was exported, but its disappearance was comparatively little felt, as the large silver five-franc coins served the purpose fairly well.

Bimetallism in France.

The great discoveries of gold in California and Australia in 1848–49 changed the whole situation. The world's output of gold increased enormously,[1] but the real meaning and effect of the increased supply were not realized for a considerable time even by experts. In France the gold Napoleons were

New gold supplies.

[1] See Table I.

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hailed with delight as the visible sign of the new Golden Age, and the Great Exhibition at the Crystal Palace in London was regarded as the celebration of the dawn of an unprecedented era of peace and prosperity throughout the earth. Gold was everywhere, to an extent which had certainly never been known before in modern history, and it was not for some time that suspicion was aroused as to the true meaning of this abundance of gold. What first made people realize it was the gradual dawning upon the people in France that their silver was disappearing. Then at last economists and financiers woke up to the real meaning of things. Gold was depreciating and was driving out silver under Gresham's Law. But it was not until 1865 that the continental countries fully realized not only what had happened but what was to be done to meet this unprecedented situation. In the meantime the Latin Union had been established by the formal decision of France, Italy, Switzerland, and Belgium in 1865 to arrange their currency systems definitely on the basis of a standard coin of equal value in every country, which would therefore circulate freely between the different countries. The franc became the model of all their coins, though Italy preferred naturally to retain its old name 'lira' for the new coin, and of course each nation retained its own designs and inscriptions on its own coins. Greece also joined the Union in 1868.

Gold depreciates.

The Latin Union.

The problem which faced the Latin Union was one of great difficulty. Being entirely committed to their policy of bimetallism they could not entertain the idea of abandoning legal tender and a free mint for silver, yet they could not possibly go on supplying coined silver for all the world to use as silver bullion, as India, for example, was doing then, at their expense. An ingenious compromise was conceived—it was first adopted independently by Switzerland in 1860—that they should reduce all their silver coins to mere token money, except the five-franc piece, and of course close the mint to these degraded coins. The effect was that the drain of the five-franc pieces abroad continued till the supply was exhausted, but the smaller coins

1865.

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remained in the country and served every purpose of a silver coinage quite well; in other words, they provided the necessary change which is the chief function of silver currency nowadays, large amounts being generally paid in gold.

The problem reversed.

Almost before this remedy was put in force, however, the whole conditions of the problem began to change again in the reverse direction. New discoveries of silver in America in the early 'sixties resulted in an increased output of silver,[1] which rapidly reduced the relative value of silver to a point below the ratio. Now silver was depreciated relatively to gold, and the action of Gresham's Law was reversed. The gold began to disappear, and Europe was flooded with silver. This was even more serious than the first difficulty. France could do without five-franc pieces but she could not do without gold, for in those days the modern use of paper money or bank-notes for the payment of large sums had not been fully developed. Things went on in this way for some time till the action of Germany after the Franco-German War precipitated the crisis. Germany had long been watching England's industrial and financial supremacy, and, rightly or wrongly, had come to the conclusion that her position was partly due to her adoption of gold coinage; and Germany had evidently made up her mind

Germany's action.

to follow that example at the first opportunity. The indemnity of £200,000,000 which Germany extorted from France proved the opportunity. Germany stipulated for its payment in gold, and forthwith proceeded to throw upon the market huge quantities of her heavy silver 'thalers', which were of about the same size and value as the five-franc pieces.

The result ought to have been a foregone conclusion. The addition of this enormous weight of silver to the world's available supplies, already so much inflated by the new stocks from America, and the withdrawal of Germany from the market as a consumer of large quantities of silver for currency, produced an absolute slump in the value of silver, and prices began to fall in a most alarming way.

[1] See Table I.

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The Latin Union were in despair. No sooner had they managed to circumvent one difficulty than they were forced to face round to the opposite extreme and devise some other new expedient. The double experience convinced them that it was absolutely impossible to maintain the double standard and their fixed ratio against such a combination of forces; but their difficulty was to discover a remedy which would meet the situation without formally abandoning their bimetallic policy, for that had become a matter of national pride, and they were now especially reluctant to abandon it, because to do so would practically mean following the example of Germany. What they did finally decide upon was another ingenious expedient. They refused to abandon the five-franc piece, that being the only silver coin which retained its legal tender, but they closed the mint to its coinage. Thus in effect they ceased to be really bimetallic at all, because they have only one silver coin which is legal tender, and the mint is closed to its coinage by the public. Since then the system of the Latin Union has come to be known as the Limping Standard because it is neither the double nor the single, but something half-way between. In effect it is practically monometallism, but in theory the currency is bimetallic because both gold and silver are legal tender.

Closing the mints to silver.

But the action of the Latin Union was the last straw which broke the price of silver, and from 1873 onwards its fall, as will be seen from Table IV in the Appendix, was greatly accelerated. It was not for some time, however, that the world began to realize that the currency question was more than merely a question for the producers of silver who were suffering by its fall. The price of silver was obviously falling to unheard-of levels, but so was the price of everything else, and it was not for some time that it began to be realized even by economists that there was a connexion between the two facts. The Quantity Theory of Money is of course as old as the Greeks, but it was entirely new to the man in the street, and for many years it was received with nothing but ridicule by business men of every country, especially in England, where

Too little money.

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the great financiers of the London Money Market simply refused to listen to it as a practical question. Gradually, however, conviction grew in thoughtful quarters, and the evidence became more and more convincing. The world's production of wealth of all kinds was increasing with unprecedented rapidity, and more and more money was required to carry on the world's business of exchange. But the gold supply remained practically stationary (see Table I and Diagram C), and silver was no longer available for the larger part of the world's monetary requirements, because in nearly all European countries it had been in effect demonetized. The result was that there was not enough money in the world to do the increased amount of money's work required, and the effect was inevitable; what money there was had to be spread out thinner and made to go further. In other words, prices fell because money was scarce and less of it had to serve. Goods had increased faster than money, and the quantity of money obtainable in exchange for a certain quantity of goods was reduced. Gold had appreciated again, and the general level of prices was falling. It will be seen from the Index Numbers in Table V in the Appendix how very far prices did fall from 1873 onwards.

Fall of prices.

The problem in India.

In the meantime, however, the problem was becoming specially pressing in India, which was directly affected by the fall in the value of silver, as a country possessing an entirely silver currency was bound to be. The value of the rupee at the original price of silver, 62*d.* per ounce, was two shillings; but its exchange value outside of India was being steadily dragged downwards by the fall in the world's market value of silver. The inertia due to India's enormous population, with its huge silver demand both for coinage and industrial purpose, and the existence of a free mint for silver, combined to maintain silver artificially at a higher price in India itself. But the effect of the fall of the external value of the rupee upon India's foreign trade and her position in relation to other countries, especially England, was disastrous. All her revenues were

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received in India in silver, but when her debts had to be paid abroad the silver fetched only its market value, which by 1893 had fallen to about 35*d.*, and this meant that the value of the rupee for foreign exchange purposes was only about 1*s.* 2*d.* The effect upon the financial position of the Indian Government especially as regards its foreign remittances was intolerable, for the loss on the exchange must in the long run fall upon the Indian tax-payer, who had to make up the annual deficits by taxation. Further, the position of the exchanges had a very serious effect upon the position of India as an importing country, though it is only fair to recall that the corresponding effect on the export side was entirely in India's favour. For the depreciation of the rupee meant that every importer had to pay more for his goods than their face value in rupees, while every exporter received a bonus on his trade, because he produced his goods in India for rupees and sold them in London for gold, which when brought back to India exchanged for much more than its face value in rupees. But what did the greatest harm to India's foreign trade was the constant risk and uncertainty introduced by the fluctuations of the exchange, dependent upon the varying value of silver. There is nothing so bad for trade as such unsteadiness of prices, for merchants cannot afford to take risks unless they see their way to make a sufficient profit on the whole to cover their losses, and a little over to compensate them for the risk, and the public must in the long run pay higher prices to cover these risks.

Fall of the Exchanges.

The position was rapidly becoming intolerable, and finally, in 1892, the government appointed a Committee to inquire into the whole position. The remedy suggested by the Committee's Report in 1893 was a heroic but most controversial measure. The only way to stop the fluctuation of the exchange value of the rupee was to regulate the supplies of coined rupees, but they could not do that with a free mint at which any merchant in the bazaar could demand to have unlimited quantities of silver coined at the face value. They therefore decided to recommend the closing of the mints to free coinage, an apparently simple and

Closing of the mints.

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harmless measure, which, however, involved the most serious consequences. For the fact of the existence of the open mint in India had always helped to maintain not only the world's price of silver but especially the actual price of silver in the Indian bazaars, and in India silver in the form of ornaments is practically the only available investment for spare capital. But the closing of the mints meant an immediate fall in the Indian price of silver to something more like the world's price, and, further, a severe fall of the world's price owing to the withdrawal of India's enormous demand for silver both for coinage and for use in industry.

Immediate consequences.

The result was that the government found themselves in a dilemma between two classes. If they let things alone the whole country through its government and its merchant system would be ruined. If they closed the mints, the country would be saved at the expense of the holders of silver whose store of invested capital would be reduced in value by at least one-third. Faced with the choice between two alternatives, which inevitably meant serious loss to one class or another, they finally decided that those who would lose by the fall of silver were less to be considered, or were better able to bear the loss, than the others who would benefit by the closing of the mints. The measure was bitterly criticized at the time and for many years afterwards; but the opposition apparently has now died down. It was very clearly brought out by the Indian Currency Commission of 1913–14 that whatever may have been the depth and extent of the feeling against the closing of the mints in 1893, there is practically no difference of opinion now that the measure had in effect been justified, and hardly any one would now suggest its repeal. Since 1893, then, the rupee has been artificially maintained at its new value of 1*s.* 4*d.*, or fifteen to the £, which is equivalent to a silver value of about 42*d.* per ounce.

Subsequent history.

The effect of the closing of the Indian mints upon the price of silver was, as had been anticipated, to produce a further fall, much worse than anything that had gone before.[1] To

[1] See Table IV.

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this, however, another cause contributed. In America, which is a great silver-using as well as silver-producing country, the silver question had also given rise to great controversy. Before 1873 the general use of paper money in the United States had practically displaced silver as the actual means of currency in many parts of the country; but the steady reduction in the demand for silver for coinage purposes throughout the world had greatly alarmed the silver producers of the West, and in 1878 they succeeded in getting through a measure known as the Bland Act, which was intended to counteract the effect of falling demand. This Act compelled the United States Treasury to purchase two to four million dollars worth of silver every month and coin it into silver dollars, which were to be legal tender; but as no one wanted these dollars in actual circulation, it was agreed that they should remain in the Treasury while their place was taken in actual use by silver certificates or paper dollars, which were, of course, immediately convertible into silver currency, if any one wanted that. To this day, in the Eastern States at least, no one ever does, and it is only as one goes west or south-west that silver dollars come into actual use at all. But this measure naturally failed to stem the tide which was overwhelming the value of silver, and in 1890 it was replaced by a further proposal known as the Sherman Act, which raised the monthly purchases to $4\frac{1}{2}$ million ounces. At that time the price was about 47*d.* per ounce, so that the value of the proposed purchases was just about the maximum of the Bland Act, while the Treasury had hardly ever exceeded the minimum. But still it was all in vain, and, as already stated, the price continued to fall so rapidly and so far that in 1893, the same year as the Indian mints were closed, America had to abandon her attempt to hold up the price of silver unaided, and the Sherman Act was repealed. As will be seen from Table IV, the price fell still further after 1893, and in 1902 touched $21\frac{11}{16}d.$ per ounce.

U.S.A. Legislation.

Repeal.

Thus, as the end of the nineteenth century approached, the Bimetallic controversy seemed to be solving itself by the general

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failure of its advocates to maintain their position against the overwhelming weight of those nations which had elected to follow the example of England. The Latin Union, India, and America had been practically forced to give up their attempts to maintain the standard of silver, and it seemed as if the world were drifting rapidly towards universal monometallism. But there were several reasons why this prospect could not be regarded with equanimity. Chief of these, though entirely discredited by the commercial community, was the quantity theory of money and the steady fall of the general level of prices, for which there seemed to be no prospect of a remedy. But there were other arguments which appealed more convincingly to the ordinary business man. In the first place, the silver-producing countries of the world were greatly alarmed at the fall in the price of silver, as was evidenced by the desperate attempts made in America to prevent it, and it was in America that the agitation in favour of the double standard was strongest and lasted longest. Presidential elections were fought over the issue, and no stone was left unturned to force the question upon the further consideration of Europe. The countries of the Latin Union were only too willing to join the struggle, for they were still in a very difficult position. They could not formally abandon their theoretical bimetallism because, to take France as an example, the Bank of France still held large reserves of five-franc pieces, which stood in their books at their full face value, and the bank could not face the writing down of that value which would have been inevitable if these coins lost their legal tender value. Again, as long as there remained in the East such countries as China which still retained their silver standard—Japan abandoned it and adopted gold in 1897—the business of foreign trade between Europe with its gold standard and these silver-using countries was still subject to all the difficulties of the old régime.

Silver producers' objection.

Position of the Latin Union.

Silver-using countries.

The result was continuous efforts on the part of the bimetallists to bring the question to the front, and repeated Conferences were held at which the question was threshed out

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again and again. But England, with her enormous financial preponderance, continually blocked the way, and finally with the end of the century the question seemed to fall out of practical politics. It was some time, however, before the real reason of this became evident. Once again circumstances were changing. The development of the South African gold fields, followed by the discovery of the Klondike fields in America in 1896, had begun to change the whole situation with regard to the world's gold supply, which was now increasing again by leaps and bounds. The result was at one stroke to destroy the primary argument of the Bimetallists, while by a strange paradox it proved once and for all the soundness of their theory. From about 1896 prices under the influence of the increased gold supply began to rise again, and before the new century was many years old the world was actually beginning to wonder whether a rise in prices might not perhaps prove as bad as the long-continued fall which had lasted for nearly twenty-five years.

England's attitude.

More gold.

For the time being then the new conditions took all the point out of the main argument in favour of bimetallism, and indeed there was some reason to feel thankful for its failure, for as the gold supply increased and prices rose, people could hardly help asking, 'What would the rise of prices have been if silver had been restored to its position as part of the world's currency supply?' The joint supply of gold and silver might well have been overwhelming. As a matter of fact the difficulty during recent years has almost been to get rid of the increased gold supply, and to prevent a depreciation of gold which would show itself in a serious rise of prices. That danger has to a large extent been avoided by the fact that all the principal nations of the world, inspired to some extent by the traditional policy of the years when gold was scarce, rushed to take the opportunity of building up great reserves of gold, and the enormous supply was taken up very easily. India too began to absorb gold in very large quantities, and any danger of an over supply of gold was at least postponed.

Absorption of gold.

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But the lesson of the Bimetallic controversy must not be forgotten. The fact which caused the suspension of the struggle supplied the final proof of the Quantity Theory of Money, for the argument that the fall of prices from 1873 to 1896 was due to lack of currency was proved by the fact that as soon as the gold supply increased prices began to rise again. The moral of this is obvious. It is not good for trade that prices should be at the mercy of the gold supply like this. Falling prices are bad and so are rising prices, and though the danger of an insufficient supply of gold has been forgotten for the time being, it must be remembered that at any time in the future the conditions might once more be reversed and a new era of gold scarcity come upon the world again. In fact it lies in the nature of things that such a return swing of the pendulum is almost inevitable, for as the gold supply increases and prices rise the effect is to encourage the development of industries and the production of all kinds of goods throughout the world leading to a further demand for gold to carry on the work of exchange. Rising prices mean more goods, and more money is required to handle them, and if this is not forthcoming the rise of prices will be checked. At the same time the rise of prices affects the cost of production of gold by raising wages and increasing the prices of all the machinery, &c., required by the miners. Thus it becomes a race between the gold production of the world and the demand for gold, and it is almost impossible to avoid the conclusion that some day the world will be short of gold again with all the consequent evils of falling prices once more. The Bimetallic controversy would then be revived, and in any case the experience of the past has shown the great disadvantage of a money medium which is liable to such fluctuations. The second argument of the Bimetallists is therefore still worth recalling that the fluctuating character of our coinage supply could be greatly minimized if it were not dependent upon one metal alone. If both gold and silver were available as currency as and when required, the value of money could be made much more stable, because in the first place the total quantity of

Fluctuating prices.

Future prospects.

Stability of double standard.

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money available would be much larger, and the supply would be much less liable to variation, because anything that might affect the production of the one metal would not be likely to affect the other in the same way at the same time. Thus the Boer War provided a striking illustration of the danger to the world through a temporary stoppage of a large part of the world's supply, which caused a distinct set-back in the rise of prices.[1] At such a time under a bimetallic régime the supplies of silver could be augmented to take the place of the failure of the gold supply. This argument also tells in another way from the side of demand. While many countries are mainly dependent on gold there are others which use mostly silver, and others still, like Egypt and India, which to a certain extent could use either gold or silver. Under these conditions if both gold and silver were legal tender, the variations of demand would probably not be concurrent but rather counteracting. If, for example, there were an extra demand for gold, England or America, Egypt and India could use more silver. If again there were an excessive demand for silver in China these countries could use more gold, and so on. Thus there would be a compensatory action in demand as well as in supply, which would greatly help to reduce the fluctuations of the value of money.

Compensatory action

These arguments are undeniably sound in theory, but the history of the Latin Union shows the practical impossibility of any one nation attempting to maintain a double standard against the fluctuations of the relative values of gold and silver, which are inevitable so long as there is a free market anywhere for these metals. The universal though tacit agreement among all the commercial nations of the world to adopt the same mint price for gold has resulted in fixing the price of gold all over the world; but as long as certain nations refuse to establish a similar mint price for silver it is quite impossible for any other nation or combination of nations to do it for themselves, because as soon as the market ratio ceased to be the same as

[1] See Table V.

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their fixed ratio the effect of Gresham's Law would be to draw away the appreciated metal to the free market outside the agreement. Single or national bimetallism is therefore impossible; no one nation nor even combination of nations is strong enough to enforce its ratio upon the rest of the world, because no such combination could possibly undertake to buy up at its own mint price all the world's supplies of the metal which happened for the time being to be depreciated in the world's markets. In other words, it is the outside market for the precious metals that a bimetallic nation has to fight. Whenever the ratio changes, all their good money goes abroad and the country is flooded with the depreciated metal, through their free mint.

Single bimetallism impossible.

But it does not follow from this that bimetallism is entirely impossible. There is one possibility which would alter the whole situation. Suppose it were possible to get all the important commercial nations of the world by an international agreement to adopt the same fixed ratio between gold and silver, and to establish a free mint for both at that ratio. The first difficulty would then disappear. There would be no foreign market to draw away all their supplies of the appreciated metal and flood them with the depreciated. The mint prices of both silver and gold being the same practically everywhere, there would be no inducement for either metal to move from one country to another. It is, of course, by no means a foregone conclusion that this would completely solve the difficulty, because even if all the chief nations of the world agree to fix their prices for gold and silver, in order to make these prices effectual they must be prepared to buy or sell unlimited quantities of the precious metals, or whichever of them may for the time being be below or above par. But how could either of them be below or above par? Only in one way. It must be remembered that the effective demand of the nations for gold and silver is limited by the quantities they require for coinage. These quantities are, of course, very large, but they are not unlimited and, especially in the case of silver, they are probably only a comparatively small part of the world's total

International agreement.

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production. They are therefore only one factor in the demand for the precious metals, though a very important one, and the question is whether they are a sufficiently large factor to control the price against the weight of all the other demands for the precious metals for industrial uses. In the case of gold they have done so, but silver would be much more difficult, because the proportion of the world's total production of silver used for coinage is much less than in the case of gold. The difficulty is that it is impossible to fix the price of any commodity by legislation, against economic tendencies. But if in the case of a particular commodity it were possible to control either the supply or the demand by legislation, then such control might be effectual by influencing these economic tendencies. It would hardly be practicable for even a combination of all the nations to control the supply of gold and silver; but, as has been indicated, they might exercise a very strong influence over the demand, and so in that way might be able to establish a fairly effectual control over the world's price of silver as well as gold, in other words to maintain a fixed ratio between the two. It was admitted by many on both sides during the bimetallic controversy that the existence of the Latin Union had at least done a great deal to minimize the fluctuations of the value of silver during the period of its existence, and it is fairly probable that an agreement among all the chief nations would be almost completely effective. But can such an agreement ever be attained? It proved impossible before the end of the nineteenth century, but the world has changed since then, and many things have been done which would have been regarded as utterly impossible before 1914. It must be kept in view that the world has learned the lesson of bimetallism as much by its failure as by its partial success under the Latin Union, and if circumstances were to change again in the direction of a money shortage there would be no need to quarrel as before over the reasons of it and the possible cures. The Quantity Theory of Money is now understood and almost generally accepted, and the only question would be how

Its limitations

and possibilities.

Difficulty of attainment.

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best to deal with the new circumstances. The world is now pretty well convinced of the unsatisfactory character of a means of exchange which fluctuates so seriously in value as gold has done.

A still better way.

But the probability is that if the nations were sufficiently sensible and sufficiently of one mind to tackle such a reform, they would prefer to go to the root of the matter and adopt an even bolder policy than that of controlling the demand for gold and silver. For there is a better way than even international bimetallism. What is wanted is some effective control of the amount of money in circulation, so as to keep it in constant proportion to the varying needs of the world's business for the means of exchange. But the discussion of the functions of money and how the precious metals fulfil these functions has suggested a further possible development which must now be more clearly indicated. It has been seen that the use of money as a means of exchange began with the adoption of something intrinsically valuable as the means of exchange, because if it were to lose its value as a means it would still retain its own value as an end in itself. The history of currency has been the gradual recognition of the fact that money is only a means to an end, that its value depends primarily upon universal acceptability, and that that acceptability may be based upon convention or consent apart altogether from intrinsic value. This has been shown by the fact, not yet fully explained, that token money, that is to say

A logical development.

silver coins whose intrinsic value is much less than their legal or face value, do as a matter of fact and under certain conditions fulfil the functions of money perfectly well. Herein lies a suggestion of great possibilities. If money which possesses only partial intrinsic value can serve all the purposes of money with full intrinsic value, why should the process not be carried a little further by lowering that partial intrinsic value until it disappears altogether? If full intrinsic value is not essential to universal acceptability, why should any intrinsic value at all be necessary? If money is only a means of exchange, a promise to pay goods when required, as it were,

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the promise itself being the thing accepted for its own sake, and not for the sake of any inherent value in the thing which represents the promise, why should we not be content to accept some other form of representation which would make no pretence to any intrinsic value. In other words, it has now to be shown that the gradual adoption of token money is the first step in a process of evolution which will carry us altogether away from the idea of intrinsic value in money, and the only logical conclusion of this development is paper money.

International paper money.

This startling suggestion will be more fully worked out in the next chapter, but in the meantime its bearing upon the possibilities of international bimetallism must be pointed out. Instead of attempting to regulate the world's supply of the raw materials of metallic currency, why not go straight to the root of the matter by introducing international paper money, the amount of which could be automatically controlled at no cost at all, by an international agreement? This points to the theoretical ideal currency, a paper currency regulated by international agreement to the exact amount required by the varying needs of the world's business, so that prices need never vary at all. An international committee watching the index numbers compiled in every country would quickly recognize any tendency to a rise or fall in the general level of prices throughout the world, due to the excess or insufficiency of the world's currency medium, and would be able to check the excess or supply the deficiency by a further issue or a calling in of some of the international paper currency. It would certainly be the ideal currency for the world, and though not at all likely to be realized in practice for perhaps centuries to come, it is worth considering as a theoretical possibility. In the meantime, therefore, it carries on the argument a stage further. From token money to paper money is the next step in the evolution of the mechanism of exchange.

GIDE, chap. v.
WALKER, *International Bimetallism.*
DARWIN, *Bimetallism.*
JEVONS, *Money*, chap. xii.
GIFFEN, *The Case against Bimetallism.*
DANA HORTON, *The Silver Pound.*

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CHAPTER VIII

PAPER MONEY

Different kinds of paper money.—Differences between paper and metallic money.—Limits of issue of paper money.—Signs of over issue.—War Paper Currencies.

It has been shown at the end of Chapter V that the correct application of the Quantity Theory of Money requires a detailed consideration of all the different kinds of 'money', in the widest sense of the term, which under modern conditions are employed to do the work of exchange. Again, at the end of the last chapter it was pointed out that the progress of the argument from one kind of money to another was a logical development or evolution, from money with full intrinsic value, through that which has only partial intrinsic value, namely token money, to that which has no intrinsic value at all, namely paper money. This development is perfectly logical, yet when the idea is baldly put forward that a scrap of paper may serve the purpose of money just as well as a piece of shining and much-coveted gold, it is at first startling. But the puzzle disappears when it is remembered that what men want money for under modern conditions is not to hang on their watch chains or round the necks of their womenfolk as ornaments (though such uses had much to do with the original choice of the precious metals as the best money material) but only to pay their debts with, and to exchange for commodities. A coin is simply an order on every producer to hand to the bearer a certain quantity of goods, and that order can be conveyed quite as well by a written paper, if there is the same sanction or authority behind the written paper, namely common consent, upon which in the long run even the

Logical evolution.

Money a mere order.

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gold or silver coin depends for its value. It is because every one is willing to accept gold and silver that every one else is willing to take them in payment. The same unanimous agreement could invest anything else, even paper, with the same power. This will be clearer if a distinction is made between three kinds of paper money.

Representative paper.

(1) Representative or convertible paper money merely represents an equal sum in coin deposited somewhere, say in a bank or the treasury of a State, like the silver dollar certificates of the United States. Bank-notes under modern legislation partake largely of this representative character, because in most countries provision is made for the compulsory deposit of at least a portion of their value in actual coin 'earmarked' for the redemption or conversion of the notes if and when required by the holder. It is easy to understand this form of paper money. It is more convenient to handle in bulk than the coins, especially silver coins, and it is quite certain to be worth its value in coin at any time, because it is convertible at will.

Fiduciary.

(2) Fiduciary paper money is merely a promise to pay, and obviously its value depends on the confidence of the public in the ability of the promissor to pay. If he is known to be a reliable man, there is no reason why his written promise should not pass current and be as good as gold. If, as has been strongly illustrated in the present war, the promissor is a government in whose good faith and solvency the people have boundless confidence, the validity of the notes may be unquestioned. In Germany, for example, the strong faith of the people in their government has made it possible to issue enormous quantities of paper money. Again, bank-notes, so far as they are not representative, are fiduciary paper money, and the history of the Bank of England notes shows how strong and deeply rooted the faith of the public in these notes is.

Conventional.

(3) Conventional and inconvertible paper money represents nothing, and makes no immediate or definite promise of any-

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thing. The term paper money in the full sense of the word should almost be confined to this kind. It is usually issued by a government which has no coin, and is in need of money to pay its debts or supply its requirements. It may be marked £5 or $5 like a promissory note, but every one knows that the government has no intention of paying the money at any particular date, and probably has no immediate prospect of having money to pay it with. It is in this form that paper money is hardest to understand, yet experience, confirmed by the history of the currency expedients adopted during the War, has shown that, under certain conditions, it is quite possible for such paper money to pass current, and to do the full work of metallic money. If these pieces of paper are invested by law and common consent—both being absolutely necessary, if anything common consent is the more necessary of the two—with the power of paying debts and exchanging for commodities, there is no reason, under certain limitations, why they should not circulate as freely as gold or silver. But there are certain differences between paper money and metallic money which must be carefully noted because they indicate the dangers of paper money, and also the conditions which must be observed if it is to serve its full purpose.

Its possibilities.

Its value is precarious.

In the first place, the value of paper money is more precarious than that of metallic money because its value was given to it by the government and might be taken away in the same way, when of course it would become worthless. Of course, the repudiation of its paper currency is a flagrant breach of common honesty of which no respectable government would be guilty, because, apart from the dishonesty of it, the effect upon the government's future credit would be disastrous; but experience in the past has shown, especially among many of the smaller republics such as in South America, that a state may be driven to this extreme course by force of circumstances, or by political conditions, as for example when a revolution has led to the establishment of a new ruler. Repudiated paper money loses its value completely by the stroke of the

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pen. Gold coins, on the contrary, even if they cease to be legal tender, have still their value as bullion.

Restricted.

Again, the value of paper money is more restricted because it depends on the law, and the paper money only passes current where that law holds good—that is, within the territory of the government which issued it. Thus in France during the War the Chambers of Commerce of many of the larger towns were authorized to issue local paper currencies which were only good within the locality, so that passing through France one received franc notes in change at Lyons which could not be cashed in Paris. The same applies to the paper money of any country outside of its own territory. It is of no value unless some one can be found who has means of returning the money to its own country, such as Cooks' or an international banker. Indeed, during the War the advantage of paper currency in this way has been remarkably shown. The English Treasury notes have not only passed current throughout many foreign countries, but were at one time actually valued at a premium compared with the metallic coinage. Thus in France, in May 1916, the rate of exchange obtainable for English gold was only 26 francs while 28 was willingly given for Treasury notes. This, however, was due to special circumstances. Owing to the prohibition of the export of gold from France it was impossible to send even English gold out of the country, while the Treasury notes could be sent under cover of a letter by post. These, however, are exceptional cases which do not alter the general rule that the value of paper money is not effective outside of its own territory. But the value of gold coin depends not on the will of the government which issues it, but upon its own bullion value, which is the same all the world over. Thus metallic money, especially gold, is essentially the universal and international money.

Treasury notes an exception.

Unstable.

Finally, the value of paper money is more variable than that of metallic money, because its value depends on the amount issued, and that depends entirely on the will of the issuing government. It is the easiest thing in the world to issue more

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paper money at a time of financial crisis, and most governments who once begin the issue of inconvertible paper money find it very hard to resist the temptation; but, as will be seen shortly, any increase beyond the proper limits of safe issue means inevitable depreciation. Germany, for example, very quickly found that in spite of her people's faith in their government, the value of her paper currency rapidly deteriorated owing to the enormous issues.

The ideal currency.

It is fascinating, however, to consider how all these considerations regarding paper money might be modified by an international agreement among all the chief commercial nations of the world to create one kind of international paper money and make it legal tender in all the countries subscribing to the agreement. The most careful precautions would, of course, have to be adopted to prevent over-issue; the issue would require to be in the hands of an International Committee absolutely independent of any one of the governments constituting it, and this Committee would control the amount issued by each country according to some predetermined scale, probably on the basis of population, allowing each country to issue so much per head of its population, as the Latin Union did with the issue of token silver under its Conventions, or, still better, adopting the method of control indicated in the previous chapter, namely, regulating the total amount of the issue by the movement of the world's index numbers.

International paper money.

If such an ideal system were ever to become possible, paper money might almost entirely supersede metallic money in actual circulation. It is probable that a reserve of metallic currency behind the paper would be regarded as necessary for a long time at least, though even that would, of course, be theoretically unnecessary. The possibility of such an international currency, costing the world practically nothing and capable of the most perfect regulation, is the economic ideal; but it is very far from being practically possible in the meantime.

All this goes to show that as a matter of fact paper money

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does often circulate freely and is as good as gold, but it does not explain why it should do so. Again, reference has been made to certain limits that must be observed in issuing paper money. What are these limits? The answers to these two questions are closely connected, and they were first indicated by a very apt illustration put forward by Adam Smith. He pointed out that in one sense the whole amount of the precious metals used as coinage is unproductive capital; it does nothing but pass from hand to hand and is never put to any useful purpose whatever. In the same way the land occupied by roads in a country like his own native land of Scotland, which possesses an excellent system of local roads everywhere, is really unoccupied from an agricultural point of view, and entirely unfruitful. If by the invention of some other means of locomotion, such as flying, men could somehow do without roads entirely, all this good land would be free for cultivation, and the world would make a net gain to the extent of the crops produced by that land. In the same way, if men could invent some other way, such as paper money, of doing money's work without the use of the precious metals, all the valuable metal now employed in this unproductive service would be set free for other uses. Instead of keeping our coins in our pockets or safes we would hang them on our watch-chains or beat them into gold rings and watches, and the world would be just so much the richer, for the world's money work would be done just as well as before by the paper money. This illustration brings out very clearly how it is that paper money can actually increase the wealth of the country, and the fact was brought home by the War. At a certain stage in the War the government found that they required gold for export to America in payment for munitions and other supplies. Now England has always been, owing to her conservatism, very largely a gold-using country, with the result that there were believed to be many millions of sovereigns in circulation—gold unprofitably employed. The Chancellor of the Exchequer appealed to the public to give up this habit of using gold

Theory paper money.

It replaces gold.

War paper.

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and use notes instead, and out of a sense of patriotism they very largely complied, with the result that for the time being gold practically disappeared from circulation in England, and the Chancellor of the Exchequer had over a hundred millions of gold handed to him for the use of the government free of charge. The people of England were no worse off; they had just the same amount of money in their pockets as before; and once they got used to it they found that the paper money served the purpose quite as well. The country's gain was therefore secured at no loss to any one. The figures of the British Treasury Note issue are given in Table VII in the Appendix.

Limits of issue.

This explanation also indicates the answer to the second question, namely, to what extent can paper money safely be issued? Just in as far as it sets bullion free for other productive purposes, that is to say, to the extent of the metallic coinage already in circulation which it displaces. There are two points to be noted in this connection. On the one hand, it would hardly be possible to drain the country entirely of its gold; a reasonable margin must be left in circulation because, if for no other reason, people who are going abroad must carry a little gold in their pockets, and there are always some old-fashioned people who will insist on having gold if they can get it at all. It is largely a question of the habits of the people, but no one would ever have ventured to prophesy that England would have so quickly and almost completely given up the gold habit as it did.

Possible margin.

On the other hand, it must be remembered that the amount of gold actually in circulation at the time of such a change does not necessarily represent the maximum amount of currency which was really desirable for the monetary business of the country. If money is scarce in the country at the time, an issue of paper money in excess of the amount of gold called in might be actually beneficial; and on this point a great deal depends on the conditions under which the change is made. At a time of crisis, which would generally be the reason for such a change, there may be, as will be explained in a later

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chapter, a much greater need than usual for actual cash in ordinary business, because owing to the failure or restriction of ordinary credit facilities, more cash is required to carry on the ordinary turnover of business. This was probably true to a very large extent in England at the time of the financial crisis due to the approach of the War when for the first week the need of currency was very severe until the new Treasury notes could be printed and issued.

Such, then, are the national or social advantages which accrue to a country that adopts paper money. Look now at the much narrower case of the advantages to a government of issuing paper money to its own people, that is to say, the selfish advantage to the government at the expense of its people. These are much more obvious, because a forced issue of inconvertible paper money provides an impecunious government with an immediate means of paying its debts to its own subjects at practically no expense at all. It really amounts to borrowing capital without paying interest, and with no immediate intention of repaying the capital. Thus it has been said that the issue of inconvertible paper currency is equivalent to a forced loan to the government, and the truth of this must have been very forcibly brought home to the German people by the enormous issues of paper money of all kinds with which the government has paid them for all the goods commandeered for war purposes.

Government issues.

But, as might be expected, this delightfully easy way of paying one's debts has its difficulties and is liable to very dangerous abuses, which were so strikingly illustrated in history that in modern times it had come to be almost accepted as an axiom that no respectable government would ever fall so low as to issue paper money—an axiom which has gone the way of many others under the stress of war conditions. The War has taught the governments of Europe what was well enough known as a matter of theory before, that the evils of paper money lie entirely in its abuse. It is all a question of amount; so long as the limit of safety, the amount of currency actually

Dangers of excess.

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required in circulation by the business needs of the country, is carefully observed, there is little to fear, but anything beyond that is absolutely fatal. This is a point which must be specially emphasized because it has been the subject of much misunderstanding everywhere during the War. People talk as if the validity of paper money depended on the good credit of the government, and it is thought that as long as the security is good no harm can come, regardless of how much is issued. Certainly this popular idea must have had much to do with the confidence with which the German people have accepted issue after issue of paper money; they believed that the government would pay it all back some day out of the indemnity to be wrung from their defeated enemies. But it cannot be too strongly emphasized that this point of view is entirely wrong. The only thing that matters to the value of a paper currency is the amount issued. If that is not too much, it will pass current perfectly well, though the credit of the government be hopelessly bad; while, on the other hand, if the issue is in excess of the real requirements of the country it will depreciate absolutely beyond all prevention, no matter how high the credit of the government stands. The history of the French Assignats during the Revolution ought to have taught the world that lesson for all time. There was a case of an issue of paper money based on the finest security in the world, the land of France; for the assignats were really mortgages over the whole State domain, which in effect meant all France. But they were over-issued to an appalling extent, and no power on earth could prevent their fall, which was tragic in its extremity, for at the last an assignat professing to be worth 100 francs or £4 passed current for less than threepence.

Government credit.

The Assignats.

Nothing can prevent a similar fate befalling any paper currency under similar conditions. No amount of security or good credit on the part of the government can save it from depreciation if over-issue is allowed. There is only one absolutely valid security for a paper currency, namely convertibility, because that automatically prevents depreciation *by preventing*

Convertibility.

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over-issue; before actual depreciation could show itself the banks would return some of the surplus paper money to the government for conversion into gold, and the excess would at once disappear. But if people are sensible and have acquired the habit of paper money, they will not want gold under normal conditions. It is because the British Treasury notes are convertible, though few people have any desire to convert them, that they have been kept absolutely right; and that is why the German paper money, which is inconvertible, will have to pay the penalty of its excess even before the War is over, but afterwards in fullest measure.

Signs of over-issue.

Fortunately, however, for the peace of mind of any government that really means to act honestly in regard to its paper money, there are certain signs which make it possible to tell when the limit of safe issue has been overstepped; and these must now be examined. The first is the emergence of a premium on gold, which shows itself in the unwillingness of people to part with gold as compared with paper, and the anxiety to secure gold of those who must have it, such as the banks for export purposes. This results in their offering a premium for gold, and of course charging the same to their customers who find it necessary to have gold. Whenever there is too much paper money it begins to fall in value, and the first to realize it are those who have to send money abroad, because gold only can be sent abroad, even when the paper is all right at home. As long as the gold and the paper are of equal value at home, no one cares which he pays or receives, but the moment people begin to feel a reluctance to accept paper or part with gold the trouble has begun, and the preference for gold very quickly shows itself in a premium at the banks, for they must have gold for their export business.

Gold premium.

The effect of the premium on gold, however, does not show itself at once to the man in the street, because he does not particularly want gold; paper serves the purpose for all his business perfectly well. But foreign merchants begin to find it affecting them in another way, which is called a rise of the rate

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Rising rate of exchange.

of exchange. The meaning of this will be fully explained in a later chapter, but at present it may be briefly indicated in this way, that merchants who have foreign debts to pay do not as a matter of fact send gold, they buy instead foreign bills payable in the country where their creditor is waiting for payment and post these bills to their creditors. Now, a bill payable in, say, London is payable in gold, so that if one has such a bill for sale it is just the same as if one had a bag of gold for exchange. And if paper is less valuable than gold in any country the owner of a London bill will expect to receive more paper for the bill than the face value of it, just as he would for gold. Thus the foreign rates of exchange rise against the country where paper is depreciating, just as the foreign exchanges went against Germany during the War in all neutral countries.[1] Too much must not be made of this argument, however, because the exchanges for entirely other reasons have at times gone against all the belligerent countries during the War. The reasons for this will be dealt with at length later on; but in the meantime the fact that Germany's exchanges have fallen so much more heavily than the English may be taken as indicating the depreciation of Germany's paper money.[2] That depreciation would certainly have been much more evident had it not been for the fact that the blockade has very drastically reduced her foreign trade so that the depreciation is concealed. Its full extent will not be seen till peace brings the resumption of foreign trade relations between Germany and the rest of the world.

Disappearance of gold.

The next sign of the depreciation of paper money, or in all probability synchronizing with those already mentioned, is the disappearance of gold, which is the natural result of Gresham's Law. The gold is hoarded or sent abroad to pay foreign debts while the paper money is everywhere at home.

All these indications, however, are comparatively unimportant, and indeed are largely unknown, to the ordinary person at home who, having no foreign connections, is not interested

[1] See Table XV. [2] See also the Russian exchanges.

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in the foreign exchanges, and who is quite content to receive payment in paper so long as the paper is apparently good for his ordinary purchases. To these people, however, who represent the bulk of the population, the effect of the depreciation of the paper money is soon brought home in another way, by the rise of prices. At first when merchants and shopkeepers begin to feel that the paper money is no longer worth what it once was, the tendency one would think would be to cause disputes over the amount to be paid for things. In practice, however, this seldom happens, because instinctively the sellers of goods, realizing that they are having to pay more for their imports, because these must be paid in gold which costs more than paper, raise the prices of these goods to recoup themselves, and this becomes infectious. The effect is that instead of prices remaining the same, while the value of the paper money is 'cried down' as it were, the easier but equally effective method is adopted, prices are raised, and the real value of the paper money, which is its purchasing power, falls just the same. And this, if there is still any gold left in the country, produces a very peculiar phenomenon, namely the duplication of prices. Prices have risen everywhere, but if you have gold to offer you will find that shopkeepers are still willing to sell at something like the old prices. This is generally regarded as the last and fatal sign of depreciation of paper money, but a word of warning is again required here as the result of the experience of the War. It is not safe to assume, as some have done in England, that a rise of prices is necessarily due to the excess of paper money. The case of England is a very strong illustration of this. Since the War, for reasons which are not easy to state fully yet, prices have risen materially, but there is no depreciation of the paper money as compared with gold; that is impossible with the Bank of England ready to change the Treasury notes into gold or their own notes at any time. On the other hand, the much higher rise of prices in Germany[1] is almost certainly due, in part at least, to the depreciation of their paper currency.

Rise of prices.

Duplication.

[1] See Diagram A.

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The remedy. It only remains to point out the remedy for over-issue. It is very simple, but usually quite impossible, namely to stop the issue of paper money and at once begin to withdraw the outstanding paper, by accepting it in payment of debts due to the government such as taxes, while paying debts due by the government in gold. Unfortunately, however, that is just the one thing the government in such a case can never do. It only issued the paper money because it had no gold, or not enough, and to go on paying its debts while receiving payment of none—for that is the effect of the cancellation of the paper money received—is impossible. Yet that is the only remedy, and it will have to be faced some day by the nations which have indulged in large issues of paper money during the War. It will involve long preparation and the slow accumulation of a gold reserve for the purpose, and Europe will not see the last of the War paper money for many years after the War.

All this shows that paper money if properly guarded may be of great advantage to a nation, especially in times of crisis, but that its use is open to many dangers. In modern times, however, another system has been evolved which is not open to the same objections, though it has its own drawbacks. This is what is known as the credit system, on which the whole financial organization of the modern commercial world is based.

GIDE, chap. vi.
JEVONS, *Money*, chaps. xvi–xviii.

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CHAPTER IX

THE CREDIT SYSTEM

A system of deferred payment and of doing money's work without the use of coinage.—The functions of a bank.—The Clearing House.—Deposits and discounts.—Bank notes contrasted with (*a*) bills of exchange and (*b*) inconvertible paper money.—Assets and liabilities of a bank.—The Reserve.

THE growth of the modern credit system, which includes the whole financial system of London and, indeed, of the entire commercial world, is a striking illustration of the way in which the thing described by a word may come to mean so much more than the name itself covers or originally implied. Thus credit simply means trust or confidence, and the original meaning of the credit system was that sellers of goods in place of demanding immediate payment were prepared to give the buyer time to pay. In other words, it was merely a system of deferred payment, and in that sense the word is still used by retail shopkeepers. But as the result of a gradual evolution the system has come to mean a great deal more than that. In many cases the debtor before the time of payment fell due was able to reverse the position by becoming creditor in his turn, selling goods to his original creditor, and so reversing the transaction or extinguishing his debt by contra account. This has in course of time developed into a system of avoiding the necessity of cash payment altogether, by squaring indebtedness of all kinds by contra accounts. This method has been extended to include not merely debts due by one person to another in the same town or country at different times, but also debts due by persons in one country to those in another, and out of this has grown the most wonderful and complicated

Time to pay.

Contra accounts.

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organization the world has ever seen, through which an enormous amount of money's work is done without any money passing at all, by the use of cheques, bills, bank drafts, and so on. Yet the whole organization still in a way merits its original title of the credit system, because the foundation of it all is that people trust each other in accepting these substitutes for money. In fact, the whole financial system of the world is built upon the idea of prompt payment of all obligations. Every one trusts every one else, because every one else trusts him, and as long as the system goes on properly in its circle it works very well indeed, and produces the most extraordinary efficiency. The pivot upon which the whole machine turns is mutual confidence, and by it the world's money work is carried on with the maximum rapidity and at the minimum cost. The system may be described as being centred in the modern bank, and the first step is to find out what are the functions and duties of a bank, and how it facilitates the working of the credit machine.

The simplest theoretical case of credit is where a seller of goods instead of receiving payment in cash accepts the buyer's promise to pay at some future date. Before that promise becomes redeemable the position of parties is reversed by the purchaser becoming the seller and *vice versa*, and the debt is wiped off by a contra account. This, then, is practically a system of deferred barter—barter of present against future goods. But it would be very difficult always to find two people thus mutually related as debtor and creditor at the same time, and to the same extent. By extending the system, however, so as to include an indefinite number of individuals it may be made highly efficient, just as in the case of barter it was exceedingly difficult to carry on the system until it was extended to include more than two individuals. Thus A buys goods from B and gives a promissory note in payment. B buys goods from C and pays for them with A's promissory note. C in turn buys goods from A and gives him back his own promissory note in payment. The circle may include

Deferred barter.

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any number of intermediate buyers and sellers until the original debt is at last cancelled.

A further development followed naturally. Instead of being all debtors and creditors of each other, the idea was invented of having one common debtor and creditor, who would balance all the debits and credits of each trader, and pay or receive the balance due to or by each. This is the business of a bank. A buys goods from B, but instead of giving him a promissory note he gives him a cheque or order on his bank. But the banker has nothing to pay this cheque with until A sells goods to C, and lodges the cheque received from him with the bank. The banker then pays B out of C's account, or following the original illustration, C sells goods to B and receives his cheque, which squares the accounts of all the parties by cross-entries in the banker's books. This, then, is the first function of a banker, to balance the debits and credits of his various customers, keeping for each of them what is called a current account into which all the cheques paid in to his credit are entered, and out of which all his own cheques presented to the bank by the payees are paid. It is a convenience to a merchant to have his books kept for him, as it were, by the bank in this way, and it saves the danger and inconvenience of handling so much coin as would be necessary to carry out all these separate transactions in cash. When the bank extends its business to many different towns throughout the country the advantage of this form of payment by cheque becomes still more obvious. A merchant in London can pay his debts all over Great Britain by simply sending cheques to all his creditors. These will be paid in by the receivers to their own banks wherever they carry on business, and will gradually find their way back to the drawer's bank in London, where they will be duly paid out of his account.

The bank.

Current accounts.

But again a further development of the system becomes possible and indeed necessary. As the banking system develops, many different banks grow up in different towns or even in the same town. Every one does not deal with the same

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bank. Every bank's customers deal with every other bank's customers, and as the number of individual transactions by cheque increases it becomes necessary for the bankers to provide some one to do for them what they do for their own customers, some one who will keep accounts between them, and balance the debits and credits of the various banks and receive or pay the balances due to or by each bank. This is what is known as the Bankers' Clearing House. In London every bank of importance is a member of the Clearing House, and country bankers are represented there by London agents. Every morning the representatives of all the Clearing Banks, as they are called, meet in the Clearing House, each bringing in the huge bundles of cheques which have been received by his bank's customers from the customers of all the other banks. An account is made up for each bank showing (*a*) on the credit side all the cheques received by the bank from its own customers drawn in their favour upon other banks; (*b*) on the debit side all the cheques drawn upon it by its own customers in favour of their creditors but which have been paid into other banks. When these debits and credits have been totalled up, the Clearing House presents to the representative of each bank a slip showing the amount credited to it for the day, the amount debited, and the balance due to or by it. If the balance is due to the bank, the Clearing House will draw a cheque on the Bank of England in favour of the bank for the amount of the balance. If, on the contrary, the balance is against the bank, they will draw a similar cheque for the amount on the Bank of England in favour of the Clearing House, for every Clearing Bank keeps an account with the Bank of England for this purpose. Thus at the close of the day the Clearing House balance at the Bank of England will be exactly as it was in the morning, for it must have received cheques of exactly the same amount as it gave out.

Clearing House.

To such an extent has this system of cheques and bank accounts been developed in England that in the year 1913 the total turnover of the London Clearing House[1] for the year was

[1] See Table VIII.

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£16,436,404,000. More than 800,000 cheques have passed through the Clearing House in one day, while the highest amount paid in one day was £131,042,000. And the whole of this enormous volume of money's work is done without the passing of a single sovereign. It will be seen, then, that the volume of business which can be carried through under such a system is colossal. It would be utterly impossible to carry on such a turnover on any other system which involved paying in cash. There is not enough money in the country to do the work of paying such huge sums in a day. All the gold in England is believed to amount only to about £200,000,000, or not as much as the maximum turnover of two days. Even if the money were there to be paid it would take an army of men to pay it in the time; but a cheque for a million pounds can be drawn and passed through just as easily as one for five pounds. The banking system has therefore created a new way of doing business, and the cheque system has been one of the most important factors in the development of our modern commercial world.

Enormous turnover.

The banks, however, have developed other functions as well as this of squaring accounts between their customers. One of the striking features of modern industry is the greatly increased use of borrowed capital, and the banker is a dealer in capital. A manufacturer sells goods to a wholesale dealer, who after some time re-sells them to a retail dealer, who, in turn, after further delay, sells them to the public, who use them, but perhaps do not pay for them immediately. Thus there is a long interval of time between the first sale of the goods and the final payment of the price by the consumer. In the meantime the manufacturer requires capital to keep himself going, to pay wages and the price of his raw materials, &c. He must take payment from the wholesale dealer by bill at, perhaps, three months' date; but he cannot afford to wait three months for payment. He must therefore sell this promise to pay for ready money, and he does so by discounting the bill with the bank. This is one of the ways in which the banks provide

Dealers in capital.

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the borrowed capital upon which industry works, and the magnitude of this financing business may be inferred from the fact that the total deposits of the British banks before the War exceeded £1,100,000,000. (See Table IX in the Appendix.)

The next question is, Where does the bank get this money? First of all, it has its own capital, but that is comparatively a very small amount. The main sources from which the bank draws its funds are deposits and current accounts. These consist of money left with the bank by people who cannot utilize it themselves, either because for the moment they do not require it owing to the fluctuating requirements of their business, or because they have made more than they can use profitably in their own business, and it lies in the bank till they can find a suitable investment elsewhere. Again, it may be that the nature of their business does not provide a suitable opening for the employment of capital, as in the case of professional men; while others have so little that it is not worth while investing it separately; or from their position they have no means of knowing about investments, and they are afraid to take risks. All these people are willing to give their money temporarily to the bank, if the bank will keep it safe for them and give them a very little interest, or even none at all. They can withdraw their money at any time when they want it. This money the banks get cheap and sell dear. They lend it out to manufacturers, merchants, &c., at a rate of discount much higher than the rate of interest payable to the depositors. The bank takes all the risks and keeps the difference between the rates as its profit or payment for work done and risks taken. This, then, is the second function of the banker; he is a dealer in money; he buys and sells capital, just as other traders do other commodities, and the effect of the very high development of this system is that in England capital need never lie idle, while on the other hand no genuine venture need ever remain untried or be lost through want of capital.

The supply.

Deposits and discounts.

There are, of course, many different systems of deposits, e.g. fixed-term deposits, deposits subject to a certain notice of

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withdrawal, or others, again, which may be withdrawn at any time without notice. The latter are practically current accounts, except that they can only be handled in one sum, while a current account may be drawn upon by cheque as required, or added to from time to time. Current accounts may be either with or without interest, though usually the latter nowadays; if any notice of withdrawal is required they become practically deposits. The rate of interest payable by the banks on deposits usually varies according to the length of term of the deposit or the length of notice of withdrawal to which the bank is entitled. Terms of deposits.

Again, there are many different forms under which the banks lend money, e.g. overdrafts, secured or otherwise, cash credits, discounts on bills, and advances on security of negotiable documents, such as bills of lading, stock exchange securities, or any other form of valuable property. Bank loans.

Before he can lend money on discount, however, the banker must first get deposits, and the accumulation of deposits is slow, because it requires confidence on the part of the public in the bank, and that only grows with time. It would be very convenient if the bankers could somehow lend money first and borrow it afterwards. They could then increase their operations immensely, and this is practically what they do. They issue bank notes, which are merely promises to pay, promissory notes by a banker. The banker exchanges the merchant's promissory note for his own; but the banker's note is better known and more likely to be accepted by the public. This is primarily how bank notes get into circulation. Bank notes *v.* bills.

But of what use is this to the merchant? He has only exchanged one promissory note for another. There are certain differences, however, between bank notes and bills of exchange which make them better for the merchant, because they are more like money. In the first place, bank notes bear no interest. At first sight this would seem rather a disadvantage than otherwise, but in one sense it is not. The value of a bill of exchange varies from day to day according to the date when it is payable, because up till the due date it is subject to

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No discount. deduction of discount, whereas after the due date has passed, interest accrues on the principal sum. The value of a bank note, on the other hand, never varies; it is worth exactly its face value at any time, never more and never less. From the point of view of currency, that is to say its capacity for passing quickly from hand to hand, this is an advantage, because the receiver does not require to consider or calculate its present value. A bank note is therefore much more like a coin than a bill of exchange.

Again, a bank note is transferable to bearer without any formality of endorsation, and 'without recourse', that is to say without any liability remaining on the parties through whose
No recourse. hands it has passed. To deal with this point fully would require a whole treatise on the law of bills of exchange, but it must suffice here to explain the salient principles of that law. The theory of a bill of exchange is that it is a 'document of title' to money. The object of the legal system of documents of title is to enable the owner of goods or valuables to transfer his rights in them by a written act, or by mere transfer of the document which represents the goods. Thus, for example, when goods are placed on board ship for export the shipmaster or his representative signs a 'bill of lading', which is in effect a certificate that these goods have actually been placed on board, and will therefore be available to their owner when the ship arrives at its destination. But in the meantime the owner of the goods may find it desirable to sell these goods, or to borrow money upon the security of them, and the object of the
Documents of title. bill of lading is to provide him with a document of title, the transfer of which will carry all his rights in the goods to another, the new owner's title to the goods being sufficiently proved by his possession of the document of title or bill of lading. This system is a great convenience to the merchant, who is thus enabled to handle the goods, figuratively speaking, though the goods themselves are for the time being out of his or any one else's reach, say at sea, and are therefore dead capital. The same system applies to store warrants and dock

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warrants, which enable the owner of goods lying in safe storage to sell or deal with them without actually handling the goods at all, or making specific delivery of them to the purchaser. Round this system there has grown up a complicated body of law designed to protect the rights of parties interested in such goods, and the whole principle of the law is to maintain the validity of the document of title.

In the same way, then, a bill of exchange is a document of title which enables the creditor to handle his money while it still remains in the debtor's hands, and the method of the system is that the possession of the bill *prima facie* proves the right of the holder to the money represented by it. Thus a bill of exchange may be defined as an order addressed by one person, called the drawer, to another, called the acceptor, requiring the latter to pay to a third person, called the payee, the amount stated in the bill on demand or at a fixed or determinable future time. It is therefore in legal terms an assignment by the creditor of his debt to a third party, and the bill is completed by the debtor's accepting it, as it is called, by writing his signature underneath or across the bill. As a matter of practice, bills instead of being drawn in favour of a third party are frequently drawn as payable to the drawer himself or his order, and the following is the usual form:

Bill of exchange.

£1,000. *London, December* 1, 1916.

Three months after date pay to me or my order the sum of One thousand pounds for value received.

A. B.

To C. D.

Then if the drawer wishes to transfer the amount to a third party, as, for example, when he wishes to discount the bill with a bank, he endorses the bill by writing his name across the back and hands it over to the bank.

The object of the law, as has been said, is to do everything possible to secure to the endorsee of the bill or holder in due course, as the bank is now called, the due payment of the bill when it becomes payable, which by custom in the above

Holder in due course.

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case would be March 4, three extra days, known as days of grace, being allowed to the original debtor for payment. To secure this it is provided that in case C. D. does not pay the amount when duly called upon, the holder in due course, the bank in this case, has the right of recourse, as it is called; that is to say, the right to come back on the original drawer and endorser of the bill (or any or all of the endorsers if there are more than one) for payment, leaving him to take the bank's place and recover payment if he can from his original debtor. This liability therefore attaches to every person through whose hands a bill has passed: he remains liable as endorser until the bill is past due. This means a very serious liability to business men who are passing bills through their hands every day, and they have developed a system of noting all these bills in a bill-book with the amounts, the names of the parties, and the due date, so that they may know how they stand.

Liability of endorsers.

It is obvious that such a system would be utterly impossible with anything which passes so rapidly from hand to hand as money does. Many people even grudge the trouble of noting the numbers of bank notes for large sums when they pass through their hands, as a protection in case these notes should be lost or stolen from them. It would be quite impossible, therefore, to handle notes at all if every one had to endorse them every time and remain liable on them for some time afterwards. Under these conditions no one would dare to accept a note without the most careful scrutiny to see that it was all right.

The same careful system of handling bills of exchange implies another disadvantage from which bank notes are free. A bill of exchange must be presented exactly on its due date; if not, the holder loses, not his right to claim payment of the money from the original debtor, the drawee or acceptor of the bill, but his ancillary right of recourse against all the intermediate parties to the bill. Such a restriction is absolutely necessary in the interests of these parties, as otherwise they would never be sure that they were free of their liability on a particular bill. That

No due date.

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liability therefore ceases when the due date has passed, and a reasonable time beyond it to allow the holder to intimate the dishonour of the bill by non-payment to any of the holders against whom he may wish to have recourse or to 'operate his right of relief', as the legal expression is. This involves a very serious obligation on the part of the holder; if he wishes to protect his full rights under the bill, he must take a careful note of the exact date of the bill and present it for payment without fail on that very day. Such a system would be absolutely impossible with anything that is to pass current as money.

Again, to protect the original debtor under the bill against an old bill being produced and presented for payment many years after the due date, when perhaps he has really forgotten whether he paid it or not, or at any rate has lost or destroyed the evidence of payment, the law provides that if a bill is not presented for payment within a certain time (six years under the English law) after its due date, the position of the parties to the bill is changed, not that the original debtor is entirely relieved from payment, but the onus is now laid upon the creditor to show that the sum due under the bill has never been paid, and that is a thing which is very difficult to prove. Once more it is obvious that such a system would be fatal to the utility of anything that is intended to serve the purpose of money. One of the functions of money, as will be remembered, was to act as a register of debt, a store of value, in other words one of the things that money is used for is to lay it by or keep it. It would never do if when, under the pressure of some need for money, one went to his store, took out a bank note and presented it to the bank for payment, one were met with the answer, 'This note is over-due. We cannot pay it now unless you can prove that it has never been paid before.' That would be utterly impossible for the ordinary holder. No such law then applies to bank notes. They are recoverable by the holder at any time, to-morrow or forty years hence as he likes.

No prescription.

All this explanation is intended to show that while a bank

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note is legally a form of bill of exchange, for it is defined in the Bills of Exchange Act as 'a promissory note drawn on a banker, payable on demand', and a promissory note is just a bill of exchange in a slightly different form; yet in order to facilitate the quick passing of bank notes from hand to hand as a ready means of exchange, their position has gradually approximated more and more closely to the position of money itself rather than of a document of title to money. And this similarity to money is strengthened by the fact that bank notes are always made for an even or round sum, such as Five pounds, Fifty pounds, &c., while a bill of exchange, like a cheque, may be for any odd sum of pounds shillings and pence. Bank notes are therefore the nearest approach to actual money that can be imagined; they are in fact practically paper money. So near do they come to being regarded as money that in many cases they have been made legal tender, like the notes of the Bank of England, which indeed used to be the most desirable form of money in England, and in some respects the most convenient form of money anywhere in the world. When notes are issued by a well-known bank which possesses the entire confidence of the people in the country, and as in the case of the Bank of England of business men throughout the world, they are really a very near approach to the ideal form of money.

Bank notes legal tender.

In fact, so thoroughly accustomed has the commercial world become to the idea of bank notes as the most desirable form of paper money, that it had before the War become almost an economic axiom that bank notes under proper regulation were much better than paper money issued by a government. It was maintained that under modern conditions even when bank notes were made legal tender they were much preferable to a forced or inconvertible paper currency issued by the government, and it is interesting now to consider the arguments which were generally accepted in proof of this preference. For the striking fact is that when the war crisis broke over Europe all the belligerents at once rushed into large issues of government paper money, apparently forgetting or disregarding the old

Better than inconvertible paper.

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theories altogether. It is only fair to note, however, that the circumstances were entirely abnormal, especially in this respect, that the choice lay not between a forced or inconvertible government paper currency and a convertible bank note but between bank notes and government paper, both more or less inconvertible, for, to take the case of England, it is very doubtful whether the government could have escaped the necessity of suspending the convertibility of the Bank of England notes, during the War. There can, however, be no question of the supreme value of the test of convertibility as between the alternative systems. In the present case England has established a new precedent because she has been able to introduce a system of convertible government paper money which is from some points of view the ideal system. But it is still necessary to emphasize the very real advantages of a convertible bank note issue as against the alternative of an inconvertible government paper money under normal conditions. The most important of these lies in the argument that the method of issue of bank notes by the bank to some extent provides an automatic regulation of the amount issued, which is in itself a safeguard against the constant danger of over-issue. Theoretically the banks only issue bank notes to their customers in the ordinary course of business, e.g. to their own customers when they draw on their deposits or current accounts, or to their borrowing clients on the discount of bills or on other securities representing real business transactions or actual assets, and this it is claimed automatically restricts the issue of bank notes to something corresponding to actual business requirements for currency. The issue of paper money, on the other hand, is regulated only by the needs of the issuing government. Both these arguments, however, have been somewhat altered by the evolution of modern conditions. The extraordinary development of the financing facilities of the modern banking world and the growth of methods of doing business which, while following the old forms, really represent different kinds of transactions, such as accommodation bills, finance bills, and the like, have to a large

War paper currency.

The banking principle.

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extent destroyed the validity of the first argument. This matter will come up again in dealing with the history of the controversy over the bank note system in England, when this argument was opposed and finally overcome by the contrary doctrine known as the currency principle.

Government over-issue.

Again, the second argument with regard to the danger of over-issue by a government has been largely changed by the much higher standard of national honour and financial efficiency and rectitude which has been displayed by the governments of the belligerents, or some of them at least, in the issue of paper money during the War. And if others have transgressed the limits of safe issue it has admittedly been under stress of abnormal conditions. It may therefore prove the beginning of a new attitude towards paper money on the part of even the most reputable governments. After all, if a government can be trusted to behave with common honesty and common sense, it is just as well fitted to be the guardian of a paper issue as the best controlled bank, except perhaps in one respect. The fact of a bank note issue being in the hands of a private institution, which is run for the personal profit of its own shareholders, was really a certain protection against the dangers of over-issue in one way. It must be kept in view that such a bank is a commercial concern conducted on business principles, and in modern business honesty is the best policy. Commercial men have realized that nothing but honesty pays in the long run. If, for example, a bank is tempted by the prospect of an extra profit into issuing too many notes, the responsible officials know perfectly well that they are running a frightful risk, not merely of losing that profit as soon as the public begin to feel the over-issue and bring the notes back for conversion, but also of losing everything else as the result of the inevitable run on the bank which will follow at once upon the suspicion of its inability to pay the notes. Thus, if a bank over-issues, the consequence is ruin to the bank itself in the first place, though the public as holders of the notes may suffer too. The bankers know this,

Banks and over-issue.

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and they are not likely to take the risk even if the law allowed them to do so; it is not worth while for the sake of the small extra profit they might make out of the excess of notes. To an impecunious and not over-scrupulous government, on the other hand, the consequences of over-issue are not so immediately fatal, or the government may not be so quick to recognize the signs of over-issue, because, the notes not being convertible, the government cannot be made to feel the pressure of the demand for their exchange into gold again. Whatever be the cause, the fact remains that the public before the War always had more confidence in the notes of a bank than in paper money issued by the government, and the result was that most governments had entirely given up the issue of paper money, and had handed over the issuing of bank notes to certain banks under strict legislative control. But the War has changed all that, and now every nation in Europe is using paper money. It may be that from this experience new views on the subject will emerge.

Changed ideas.

Having now dealt with the three functions of a banker as an account keeper for its customers, as a dealer in capital, and as the issuer of bank notes, it next becomes necessary to consider the position of the bank with regard to its various customers, debtor and creditor, and to make up its balance sheet of assets and liabilities as follows: Its assets are its own capital, its advances on discount of bills and other securities, and its cash balance or reserve. Its liabilities, on the other hand, are its deposits and current accounts and its note issue. The point to be specially noted in comparing the two sides of this balance sheet is that although the assets may largely exceed the liabilities, the latter are nearly all due on the spot or at very short notice, while most of the assets are only realizable after more or less delay. Its bills discounted, for example, are only due at certain dates, and although they are falling due and being paid every day, it is impossible for the bank to anticipate payment,—unless some other bank will re-discount the bills for it. In case of a run on the bank, therefore, the bank has only one asset to

Bank's assets and liabilities.

Liquid assets.

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fall back upon immediately, one asset which is perfectly liquid and available on the instant to meet any abnormal claims that may be made upon the bank. For the fact must be clearly realized that the bank bases its whole business on the assumption that normally only a certain proportion of its customers will want their money back at any given time. If they had to keep all their customers' deposits lying waiting, on the off chance that they might be wanted, there would be no possibility of doing business at a profit at all, and the customers would require to pay the banks a heavy premium for keeping their money safe, instead of receiving interest on their deposits. The banks have learned by experience that in normal times they may safely lend out all but a certain proportion of their deposits, but they must keep a certain part always at hand in actual cash or very nearly so, to meet the ordinary requirements of the business, and something over to provide for unusual requirements. In other words, in addition to keeping a certain amount of what they call 'till money', that is to say actual money for the day's turnover of cash, they must always have at hand a reserve of available funds in case their customers should happen to require more than their usual for a time. This reserve, then, becomes the pivot of the bank's whole business, and it is a very difficult problem to know just how much of a reserve the bank ought to keep, and how to keep it, that is to say, how to maintain it at a safe figure and prevent its being drawn upon too rapidly in times of difficulty. The natural desire of the bank's shareholders is to keep the reserve as low as possible, because money lying unemployed, as the reserve must, is purely unproductive capital. On the other hand, the reserve is the sole security for the ability of the bank to meet all possible claims that may be made upon it *immediately*, and that is the one thing essential to a bank, because the slightest hesitation in paying what is asked for would at once alarm all its depositors and bring them clamouring to the bank for their money, which otherwise they would never have thought of withdrawing. Self-preservation therefore dictates the keeping of an

The reserve.

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adequate reserve, while the desire to earn dividends points to its reduction as low as is compatible with safety. How then are these conflicting interests balanced?

GIDE, Book II, chap. ix, §§ 1–4; chap. x, §§ 1–5.
WITHERS, *The Meaning of Money*, chaps. i–v.
EASTON, *Money, Exchange and Banking*, chaps. viii–x.

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CHAPTER X

THE ENGLISH BANKING SYSTEM

The Bank of England.—The Other Banks.—Lombard Street.—Where they get their money and what they do with it.—The Bank Charter Act, 1844.—The Issue Department of the Bank of England.—Regulation of bank note issues in other countries.—The Banking Department.—The Weekly Return.—The Reserve.

THE whole banking system of the modern commercial world is so largely dependent on the banking system of London, which in turn is centred in the Bank of England, that it is necessary, in order to understand the banking system of any country, to examine the English system first. The War has proved more conclusively than ever the international character of finance, and the way in which disturbance in any country is bound to react upon the financial world everywhere. The world's financial system is perhaps the most complex and many-sided organization ever seen, and it can only be understood by getting at the core of it first, and working outwards.

The hub of the universe.

It is a simple statement of fact that that core lies in the small area of about a square mile which houses the great London Money Market, and it is no exaggeration to describe the building of the Bank of England, the 'Old Lady of Threadneedle Street', which is the centre of that area, as the hub of the universe, for, as the War has shown, finance rules everything.

The financial system of London may be divided into three parts. There is first the Bank of England itself, which is the pivot of the whole system; next, in the inner circle as it were, are all the 'Other Banks', as they are called, of Great Britain, meaning all the Joint Stock Banks and the comparatively few private banks still remaining, which make up the banking

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system of Great Britain. For in order to understand the English system it must be realized that in England, to a degree which holds good nowhere else, the financial system is specialized or divided between home and foreign business. Roughly speaking, though this is becoming every year less true, the British banks as such do not touch foreign business. Finally, in the outer circle is a heterogeneous collection of banks and financial institutions of all sorts, generically known as Lombard Street or the Outside Money Market, which can be distinguished from the inner circle by the fact that it does the greater part of the foreign monetary business of London, though this must not be taken to mean that it does not do a very large share of the home business too. It does both and is in a way the connecting link between the two parts of the system. The name is an indication of the history of the system. In the thirteenth century the Lombards, coming in the first place as agents to collect the Pope's taxes, settled down in this part of London and began to carry on their traditional business of money-lending and also foreign exchanges and marine insurance. Thus the quarter which subsequently became the home of the goldsmiths, the first English bankers, acquired its name, which has ever since been synonymous with money. Lombard Street itself is a small street running off among seven others from Bank Corner, the famous centre of London's business quarter, and probably the busiest street-corner in the world. Every one of these streets, for half a mile or so from the Bank itself, is crammed with the offices of financial houses and branches of banks from every country in the world. Every bank of any importance in the world has a branch or an agency, if not its head office, within this narrow radius, to which as a whole the general title of Lombard Street is applied.

Specialization.

Lombard Street.

The method of the inquiry into this enormous and complicated system is indicated by the line of thought suggested at the close of the previous chapter. The essence of a bank's business is receiving and lending money or dealing in floating

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capital. The best method of attacking the problem is therefore to follow out these two sides, by putting the inquiry into two questions: 'Where do all these banks get their money?' and 'What do they do with it?' At the same time the vertical division, as it might be called, of the London system into home and foreign business must also be kept in mind. The following is an attempt to apply this double system of division of the system.

Home and foreign business.

I. Where do the Banks get their Money?

A. The Bank of England.

Bank of England.

Home sources. In the first place, the Bank of England is in every sense of the term, except the name, the national or government Bank. It holds all the accounts of the various departments of the government; it manages the National Debt; it is the representative of the Mint, and generally speaking it exercises the fullest functions of a state bank. But it is one of the paradoxes of the English system that the Bank of England so far as its constitution and control are concerned is entirely a private institution, theoretically at least. Officially the government has no control over it whatever, not even a representative upon its directorate; but as a matter of fact the final say in all its affairs really lies with the government, while its actual policy is dictated entirely by the public interest, so far as the directors can ascertain it. Though the Bank is a private concern, owned by ordinary shareholders, it has for many years fully realized and acted up to its position as the official head of the English banking community, and the interests of the shareholders have always been regarded as secondary to the public interest. From the present point of view the importance of this privileged position of the Bank is that it holds all the government accounts, which at times amount to enormous sums. These Public Deposits, as they are called, have, for example, amounted at times during the War to nearly £150,000,000.

Public Deposits.

Many large business houses, public companies of all kinds,

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and even private persons also keep accounts with the Bank of England, and these are classed in the Bank's Weekly Return as Private Deposits. There is, however, a radical difference between the Bank of England and all others, in respect that it pays no interest on private deposits. Its total deposits therefore are not nearly so large as its position otherwise would indicate. The great bulk of the private deposits in England is held by the Other Banks.

One of the most important contributions to the deposits of the Bank of England arises from the fact that all the Other Banks make it an invariable custom to keep a considerable balance with the Bank of England as their own reserve. This is in fact the outstanding characteristic of the English system, which is known as the 'one reserve' system. Instead of each bank keeping its own reserve, they all lodge it with the Bank of England, which thus becomes in a very peculiar sense the bankers' bank. This fact again illustrates the solidarity and centralization of the English system. All the banks support the Bank of England by giving it their deposits (without interest be it remembered) in normal times. They thus establish a certain claim on the Bank for special assistance to any bank that may find itself in temporary trouble; and this claim is fully recognized not only by the Bank of England itself, but by all the other banks, for they clearly recognize nowadays that they all stand or fall together. A serious run on one bank necessitating its suspension would almost inevitably, in times of financial nervousness, produce a run on other banks, and the effect of such a panic is peculiarly cumulative. If one bank goes, others are almost certain to follow.

Private Deposits.

Finally, the relations between Lombard Street and the Bank of England are so close, especially in times of strain, that most of the foreign bankers, bill brokers, and other financial institutions in the Outside Money Market make a practice of keeping a balance in normal times with the Bank of England.

Foreign sources. These are on the whole similar in character to the home sources, the only difference being that their origin

Foreign supplies.

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Foreign loans.

is foreign. Thus many foreign governments have at times large sums at their credit with the Bank of England because London is a very important centre—it was until recently almost the only centre—for raising large government loans. Suppose, for example, that the Turkish Government proposes to add to its fleet. Orders are placed with British ship-builders, and in course of time the ships are completed and payment is due. But the Turkish Government can only find the necessary funds by raising a loan, which can best be floated on the English market, with perhaps the assistance of French financiers. The money borrowed in England would then be paid into the account of the Turkish Government with the Bank of England, to lie there until drawn upon by cheques in favour of the ship-builders.

Foreign Private Deposits.

Many foreigners of all kinds, from crowned heads downwards, also keep accounts with the Bank of England, because after all the Bank of England is just about the safest place in the world in which to keep one's financial sheet-anchor. One can always be sure of getting payment as and when it is wanted in London, in gold for example if required, which is not always true, especially in times of crisis, in other countries. Only twice in the history of the Bank has this not been literally true, once during the suspension of gold payments due to the Napoleonic Wars, and again for a very short time during the Moratorium in 1914.

Many private firms in foreign countries, and especially foreign banks and foreign merchants, also keep accounts with the Bank of England because so much of their financial business finds its way to London for final settlement, and an account there is always the most convenient thing possible, wherever one may want to make payments. If, for example, an Austrian in Vienna wants to make a payment to an Argentine Spaniard in Buenos Ayres, the most desirable form of payment from the creditor's point of view will probably be a cheque on London. A London cheque is always welcome anywhere, because under normal conditions there are always many who require to remit to London, and who are glad to get such a cheque.

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It is difficult, however, to distinguish between this kind of private deposits by foreigners in the Bank of England and those already mentioned as home receipts by the Bank from Lombard Street, for many of these deposits, though actually foreign in their origin, would naturally be paid to the Bank by the representatives in London of the foreign owners.

B. The Other Banks. Roughly speaking, the British Banks as already indicated confine themselves to home business and receive all their funds from private deposits. But as a matter of fact in recent years some of the large London Joint Stock Banks have been doing an increasing share of the foreign business which comes to London, and have received considerable deposits from foreign sources of the kind above described in the case of the Bank of England. This, however, does not affect the general truth of the statement that their funds are mainly derived from British private depositors, and the amount so received, as already mentioned, amounted before the War to the colossal total of over £1,100,000,000. (See Table IX (1).)

The Other Banks.

C. Lombard Street, like the Bank of England, also draws its supplies both from home and abroad. The Outside Money Market includes not only the representatives of foreign banks and other financial institutions abroad, but also all kinds of purely British houses, some of which are engaged mainly in foreign business, but many others just as largely in home trade. Discount Houses, both home and foreign, Accepting Houses, primarily foreign, and all sorts of other interests are represented in London, because Lombard Street is the one place in the world which provides the quickest and therefore the most profitable market for money. There you can either borrow or lend money, as your position for the time being requires, on the shortest possible notice, and to almost any amount. Lombard Street is the meeting-place of the world's supply of and demand for floating or loanable capital. Every one who has money to spare, even for the shortest period, can send it in to Lombard Street as 'call money', and he will

The Outside Money Market.

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receive a small rate of interest on it even for the few days or weeks that he can allow it to remain. Such money received from large financial institutions of all kinds, insurance and investment, and even commercial and industrial companies as well as the banks proper, is the chief source of Lombard Street's funds; but they also have the control from time to time of large funds belonging to the foreign banks and merchants which many of them represent. Lombard Street therèfore is the meeting of the waters in the world's financial affairs.

II. What do they do with the Money?

A. The Bank of England. The drains upon the Bank of England's funds, or the employment found for it, are chiefly for home purposes, though many of them are really the result of foreign requirements. Taking the actual home needs first, the Bank has often to advance money temporarily to the government, when certain expenditure has to be met before the funds to meet it from taxation have yet been fully collected; or again, one department may be heavily out in its expenditure while another has large funds at its disposal. On balance the government is, on the whole, not often a borrower.

Government borrowing.

The Bank being, after all, an ordinary private concern, must employ the bulk of its spare funds in the ordinary lending business of a banker, that is to say on the discount of bills, loans on stock exchange securities, and other similar kinds of financial business; but owing to its peculiar position the Bank in normal times does a comparatively small proportion of the total business of this kind done daily in London. The reason is that the Bank, being the Central Reserve Bank of the whole English system, must keep a much larger proportion of its total deposits in reserve than any of the Other Banks, which, as already explained, look to the Bank of England to fulfil this function for the whole system. In normal times, before the War, the Reserve amounted to over fifty per cent.[1] of the whole

The Reserve.

[1] See Table XI.

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liabilities of the Bank to its depositors both public and private, and the necessity of maintaining this large proportion in Reserve naturally restricted its ordinary lending business. But the peculiarity of the Bank's position is that while in normal times it does only a comparatively small share of the discount business, in times of difficulty the whole strain of the Money Market's requirements is thrown upon it. Apart from such times of crisis the Bank does a considerable business at times with the Lombard Street houses who come to it for funds when their ordinary supplies are temporarily insufficient; and in this way, as will be seen later on, the Bank is able to exercise a very powerful control over the position of the Money Market as a whole. Discounts.

B. The Other Banks. The employment of their funds is almost entirely confined to home business, though this characteristic is changing markedly in recent times. They employ a considerable proportion of their funds, as much as they think safe in view of the nature of their liabilities to their depositors, in lending to merchants, manufacturers, stockbrokers, &c., on discount of bills, on overdrafts or cash credits, and on the security of all kinds of valuable and quickly realizable property, stock exchange securities, &c. But it is generally regarded as unsafe for them to invest in land or immovable property, because at a time of difficulty, such as a financial crisis, or when there is a run on the bank, such securities cannot be realized quickly enough. Of the rest they send a comparatively small portion to the Bank of England as a reserve, and the remainder, or the greater portion of it, is lent to Lombard Street, 'at call,' that is to say as call money, to be used by them in the short loan market already described. There has, however, been a steady tendency in recent times for some of the other banks to keep a larger amount of cash and even gold in their own hands as reserve; but as they do not publish any information with regard to these holdings the amount of them is largely speculative. Home discounts. Call money.

C. Lombard Street. The Outside Money Market will lend money to any one who has good security to offer, and on

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almost any kind of security. Their main business is the discount of bills both home and foreign, but they also lend money for all sorts of purposes and for any time from the shortest periods, even overnight or for the week-end, upwards. The rate of interest they receive on such short loans is comparatively low as a rule[1]; but the rate they pay for the call money is lower still. They work on small margins of profit, and their whole business is to keep their money constantly employed. This business is world-wide in character and distribution. The business of discounting foreign bills, which is still largely and was formerly entirely in their hands, requires some further explanation on account of the part it plays in other matters to be dealt with later on. Suppose that a merchant in Buenos Ayres wishes to buy lace goods from a Nottingham manufacturer. Some method of payment must be arranged, because the Nottingham man knows nothing of the foreigner, and can hardly be expected to give credit to a total stranger. The apparently simple way is for the Argentine to send the money with the order, but he is probably not able to pay in advance; besides, he may not care to trust the manufacturer. What he does, therefore, is to offer payment by bill of exchange, say at three months' date, against receipt of the bill of lading for the goods. This, however, would not satisfy the exporter; he must have some sort of guarantee that the buyer is good for the money, and that the bill will be met when due, and so the custom has grown up in London of certain large firms who have connections abroad lending their names to such bills as guarantors by accepting the bill in place of the foreign buyer. This they do for a commission paid them by him, and because they know, or are informed by their house in Buenos Ayres, that he is good for the money. These 'Accepting Houses' then, as they came to be called, have become middlemen of a sort between the manufacturer and his foreign customer. When the goods are ready for shipment the manufacturer sends the bill of lading for the goods to the forwarding house in London

Short-loan market.

Accepting Houses.

[1] See Table XVI (1).

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along with the bill of exchange for their value. The latter is presented to the Accepting House for their signature, upon which the bill of lading for the goods is handed over. Then the bill of exchange can be discounted either with an ordinary bank or with one of the large Discount Houses, as they are called, in Lombard Street, which lends the money willingly on the double security of the Accepting House and the manufacturer himself, who as drawer of the bill is of course ultimately liable. Thus the business of foreign discounts in London has gradually become specialized or divided between these two classes of firms, the Accepting Houses and the Discount Houses, and the two together represent a very large and very important part of the business done in Lombard Street.

Foreign discounts.

In the diagram on page 119 an attempt is made to represent, something after the fashion of a wheel and its spokes, the ramifications and interrelations of this complicated system. The principal point to be noted in the description of the system is how the whole organization is centred in the Bank of England. The Bank, in addition to its own ordinary current accounts and deposits, holds the reserve of all the Other Banks; it holds also the government funds and often balances belonging to foreign banks and foreign governments also. It is no exaggeration therefore to say that the insolvency of the Bank of England would involve the bankruptcy of every one in England from the government downwards, and also in all probability the bankruptcy of every state bank and almost every government throughout the world. It is simply impossible to realize what it would mean. Thus the responsibility of the Bank, not only to England, but to the financial world as a whole, is very heavy, and it is all the more paradoxical that, as already pointed out, practically no government control over the Bank should have been found necessary. While this is true, however, it must be very clearly recognized that, as a matter of fact, the actual control over the Bank's affairs is of the most stringent kind possible, because it is exercised by the public opinion of the whole Money Market,

Position of the Bank.

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which would certainly be enforced if necessary by the government. But it has never been necessary for the government to interfere or to overrule the directors. On the contrary, the Directors of the Bank of England have at all times of crisis been the chief advisers of the government, and during the war crisis of August 1914 their action was an example to the whole banking world. This idea of the position occupied by the Bank of England and its responsibilities is more than anything due to the work of one man, Walter Bagehot (1826–77), who in his book called *Lombard Street*, originally published in 1873, was practically the first to set forth the real constitution of the London Money Market and the true place of the Bank of England in it. When his work was first published he was describing an ideal, but the ideal has every year become more and more actual; and now there is no financial institution of any kind in any country that more thoroughly deserves the public confidence which it unquestionably enjoys than the Bank of England. And this has been achieved with the absolute minimum of government control. The only legislation affecting the Bank of England is the Bank Charter Act of 1844, commonly called Peel's Act, and that only deals in detail with the one question of note issue. How that came to be so involves a brief account of the history of the Bank of England from its foundation.

Bagehot's work.

Early history of banks.

The Bank of England was founded in 1694, but the development of banking in Europe which led up to its foundation had been going on for several centuries before that date. The earliest banks in Europe were those of the Italian Republics which are said to date back to the twelfth century, though the famous Bank of St. George at Genoa was only definitely established in 1407 and the Banco di Rialto in Venice in 1587. The first bank in Western Europe was the Bank of Amsterdam, founded in 1609, followed by the Bank of Hamburg in 1619, and the Bank of Rotterdam in 1635, and the first bank-note was issued by the Bank of Sweden in 1656, two years after its establishment. In England the banking system only began to

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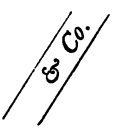
cessors none of the London merchants would trust the government with a loan. It was then that a Scotchman named William Paterson came forward with the scheme which led to the formation of the Bank of England. He offered to lend the government £1,200,000 on condition that they granted him a Royal Charter for the incorporation of the Bank, with the right to carry on all the business of bankers, including deposits and discounts, and conferred upon the Bank the right to issue notes to the extent of the sum lent to the government. Thus began the modern National Debt of England.

In 1697 a new charter gave the Bank of England the monopoly of joint-stock banking in England, and this was further strengthened by the Act of 1708, which restricted the number of partners in banks of issue to six during the continuance of the Bank of England. In 1751 the Bank took over the management of the National Debt. The granting of this monopoly to the Bank of England is the key-note to the history of the subsequent development of banking in England. From this point onwards the development of the English system may be compared with the entirely different system in its immediate neighbour Scotland, as illustrating two opposite ideas of the kind of body which should be entrusted with the functions of a banker. In England, with the exception of the Bank of England, the banking business was carried on entirely by private banks, that is to say by private firms composed of a number of individual partners under firm-names composed of the names of these partners or some of them, and usually ending with '& COMPANY',—hence the form still in use in crossing cheques  Public confidence in these banks was largely based on the faith of the public in the integrity and stability of the private individuals composing the firm, and this naturally restricted the operations of the bank to the town or district where the partners were known. As the Bank of

Its monopoly.

Private Banks.

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England confined itself entirely to London and had no branches throughout the country, it practically meant that all the banking business of the country was localized, each town or district having its own local bankers. In Scotland, however, a different system began to develop at an earlier stage than in England. A number of large joint-stock or incorporated banks were formed, that is to say, joint-stock or shareholding companies incorporated by Royal Charter, such as the Bank of Scotland in 1695, the Royal Bank in 1727, and the British Linen Company in 1746. These large concerns established branches in many of the chief towns of Scotland, and their reputation became firmly established throughout the country. Thus the two systems may be described as a large number of small, local private bankers throughout the country in England, while in Scotland it was a small number of large joint-stock banks with branches covering the whole country.

The Scotch system.

Suspension of payment, 1797–1823.

The chief event in the history of the Bank of England before the Act of 1844 was the suspension or restriction of cash payments during the Napoleonic Wars. Till then the use of bank notes in England as common currency had been greatly restricted by the large denomination of the notes issued. At first the lowest amount of any note was £20. In 1759 £15 and £10 notes were authorized, and £5 notes in 1793. With the suspension of cash payments in 1797, however, the need of smaller notes was at once obvious, and £1 notes were immediately issued in considerable quantities. The crisis which was the immediate cause of the suspension soon passed, and the Bank would have been quite willing to resume cash payments; but so little objection was there to the note system that no one asked for its discontinuance, and the suspension was prolonged. At first the issue was comparatively small, only some £10,000,000 in 1797, and it was not till 1809 that there began to be any suspicion of inconvenience attached to the note issue. Then it began to be realized that gold had gone to a premium, the price rising to about £4 12*s.* per ounce in 1810 instead of the official price of £3 17*s.* 10½*d.*

Premium on gold.

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Financial people began to talk about the high prices, which were then prevailing,[1] being due to inflation caused by the excessive issues of paper money throughout the country, for although the Bank of England issue was still only about £19,000,000 the private banks throughout the country and in Ireland had increased their issues enormously. A Bullion Committee was appointed in 1810 which marked the beginning of a tremendous controversy, the very meaning of which it is now almost difficult to comprehend. The truth is that the financial world of those days was only feeling its way by experience to a realization of the meaning and principles of money, and it is largely to those discussions that we in modern times owe our very clear-cut ideas as to the principles and functions of money. But from our present point of view the chief importance of this controversy was that out of it grew the alternative principles which formed the basis of the later controversy over the question of the best method of regulating the Bank of England's note issue. The Restriction itself was finally removed in 1819–23, by which time the new currency of 1816 was in full being; but the lessons of the controversy were still to be applied to banking problems. From 1790 to 1820 there had been growing dissatisfaction with the English system owing to the disastrous frequency of failures among the private banks. Between 1810 and 1817 alone, there had been 157 of these, and a considerable agitation was growing in favour of some approximation to the Scotch system of joint-stock banks. In 1823 a pamphlet was published by one Thomas Joplin in which he pointed out a fact which had apparently not been fully realized till then, namely, that the Bank of England's monopoly only prevented the establishment of joint-stock banks *with the right to issue notes*, and that if any one cared to establish a joint-stock company to carry on the other parts of a bank's business there was nothing to hinder him doing so. But, as things were then, the impossibility of obtaining a note issue was quite sufficient to prevent the

Bullion Committee.

Joplin.

[1] See Table V.

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establishment of any other joint-stock banks, because in those days the issue of notes was looked upon as the most important and certainly the most profitable part of a bank's business. The fact is that banks as they are now did not exist then. The development of the system of current accounts and payment by cheque was still in its infancy, but no one then could have conceived that banking business would develop on the lines and to the extent which it has since done. Indeed, that development is very largely just the result of the history which is being narrated. No one, however, paid much attention to Joplin's pamphlet at the time, but in 1824–25 there was another series of bank disasters, seventy-six of them failing, and in 1826 a new Act was passed which allowed joint-stock banks to be established with the right of issue, so long as they had no office or branch within sixty-five miles of London, this being the first establishment of the metropolitan area which afterwards became the Bank of England's absolute preserve for note issue purposes. This same Act once more raised the minimum value of bank-notes to £5, and an attempt was made to extend this provision to Scotland, which, however, was successfully resisted, fortunately for Scotland, thanks largely to Sir Walter Scott.

The Metropolitan area.

In 1833 when the Bank of England's Charter again came up for renewal, the view which had been advocated by Joplin was specifically adopted in the wording of the new charter, and immediately the development of the great modern joint-stock banks of London began apace. But the unstable character of the provincial joint-stock banks which possessed the right of note issue, still attracted public attention from time to time to the question of the regulation of note issues, and finally the matter came to a head in the great controversy which preceded the passing of Sir Robert Peel's Bank Charter Act of 1844. The principles underlying the arguments of the two sides were known as the Currency and the Banking principle respectively. The former maintained that no security for a bank-note issue could be satisfactory except the retention of actual currency in reserve or 'earmarked', as it is called, for the conversion of the

Regulation of notes.

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notes when required. The advocates of the banking principle, however, maintained that bankers could be relied upon to restrict the issue within safe limits, because the nature of banking business provided a natural limitation to the issue, notes being issued only on actual commercial transactions representing a bona-fide need for currency. In reply to this it was argued that experience during the suspension of payments had shown that excessive issues were not so checked; during the South American boom in 1809, for example, owing to enormous loans by the banks on discounts, the amount of the issue rose dangerously high. It must be remembered that in those days the Bank did not possess one very powerful weapon which it now uses successfully when necessary, and which will be explained in the next chapter, namely the right of raising the rate of discount, or, in other words, charging more for its loans in order to check an excessive demand. In these days the usury laws were still in existence and the maximum rate of interest chargeable, namely five per cent., was not nearly high enough to check excessive borrowing in times of excited speculation. It is hardly worth while discussing now, however, whether, under the extended use of this means of self-protection, the Bank of England might have developed on better lines. The fact is that the Currency party triumphed, and the Act of 1844 tied up the English bank-note system under such restrictions as completely prevented its further growth, and so resulted in diverting the development of the English banking system along entirely different lines from what might otherwise have been the case.

Banking *v.* currency principles.

The leading principles of the 1844 Act seem to have been, first, that the issue of bank-notes should gradually be monopolized in the hands of the Bank of England, and, second, that that issue should be limited to a fixed amount against securities, all the rest being against full gold cover only. To secure the first, it provided that no bank having an office in the metropolitan area of 65 miles round London was to be allowed to issue notes, and that in the provinces of England no

The 1844 Act.

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new joint-stock bank was to be allowed to begin issuing notes —Scotland and Ireland were accorded special treatment— while the future issue of those which already had the right of issue was to be limited to the amount of their actual issue at the time of the passing of the Act. In the case of the Bank of England its business was to be divided into two entirely separate departments known as the Issue Department and the Banking Department respectively; the former was to do nothing but issue notes, the latter to carry on the whole banking business of the Bank. The regulation of the Bank's note issue was laid down as follows: The actual issue at the date of the Act was taken as £14,000,000 and this amount they were to be allowed to issue in future against securities, including the amount which the government then owed the Bank, which was about £11,000,000. This sum of fourteen millions was to be known as the Authorized Issue. Beyond this the Bank may issue as many notes as they please, so long as the full value of them in bullion is deposited with the Issue Department. Silver to the extent of one-fourth was allowed by the original Act; but for many years the Bank has not exercised its right to hold silver. The notes of the Bank of England are legal tender in England only (not Scotland and Ireland), except of course at the Bank itself.

The Issue Department.

Authorized Issue.

With regard to the existing issues of the provincial banks, both private and joint-stock, it was further provided that should any such bank fail or give up business or become amalgamated with another its authorized issue should forthwith cease, and it would be within the right of the Bank of England by Order in Council to have two-thirds of the lapsed issue added to the amount of theirs. As showing how almost completely effectual this policy has been in centralizing the note issues of England in the Bank it may be mentioned that in 1844 the provincial issues in England amounted to £8,631,642 issued by 207 private and 72 joint-stock banks, while in 1915 they had fallen to £219,983 issued by ten banks.[1]

Provincial Issues.

[1] See the *Economist* Banking Number, May 20, 1916.

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By the addition of their share of these lapsed issues, the authorized issue of the Bank of England has been raised to £18,450,000, which it will be noticed is materially less than the full two-thirds of the lapsed issues. It was sometimes thought that the authorities of the Bank of England were keeping this margin of over a million as a reserve for use in times of crisis; but it was not so employed in the great war crisis of 1914.

This stringent regulation of the Bank's note issue was very severely criticized for many years, and there can be no doubt that it was the main cause of the English banking system following the lines of development which it actually chose. The weakness of the system was its absolute inelasticity at times of crisis when more cash is wanted. Notes would serve the purpose, but the Bank cannot issue a single note except against gold, which is quite useless. This absolute restriction of development of the issue of notes has therefore compelled the adoption of an entirely different system, namely the use of cheques instead of notes, and there is much to be said for the argument that that has proved to be in the long run a better system.

Inelastic system.

It is interesting before leaving this part of the subject to note the various alternative systems of regulation of note issue adopted in other countries. These are three in number, namely:

Other systems.

(1) The principle of the fixed ratio, that the number of notes issued must be covered by gold and securities in certain fixed proportion. This is the German system, for example, the proportion being one-third gold and two-thirds securities, but there a special provision is made that the bank may exceed the fixed proportion on paying to the government a tax of 5 per cent. on any notes in excess. This heavy tax was thought to be sufficient to prevent any danger of over-issue.

(2) The principle of maximum issue. This is the French system, where the total issue was limited before the War to 6,800 million francs, and there is no provision as to the amount of gold to be held. That is left to the prudence of the bank, but the

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Bank of France, which issues these notes, is under severe legislative restriction as to its ordinary banking business.

(3) Practically the whole amount of the note issue is secured by the deposit of securities, as in America till 1914.

Weekly Return.

The only provision made by the Act of 1844 with regard to the Banking Department of the Bank of England is that the Bank must publish every Thursday an account, known as the Weekly Return, showing the position on the previous day of the whole accounts of the Bank, including both the Issue Department and the Banking Department. A specimen of this Weekly Return will be found in Table X in the Appendix.

It is very important that this account should be really understood, for its publication every Thursday at noon is awaited with the greatest interest, and the announcement of the Bank Rate which is then made, depending upon the figures of the account, goes far to control the value of money, and the movement of floating capital throughout the world. The pivot of the whole matter is the strength of the Reserve and its proportion to the total amount of the liabilities it might be called upon to meet. It is essential in the first place to be quite clear as to what the Reserve really is, because in the lay mind there is constant confusion as to what the Reserve consists of, and where it is kept. Especially, confusion is very common between the Reserve which is part of the assets of the Banking Department, and the gold held against the notes by the Issue Department. These are two entirely different things, which must on no account be confused with each other, and they appear in different parts of the Weekly Return. The last two items on the credit side of the account of the Banking Department, namely: 'Notes' and 'Gold and Silver Coin', are the Reserve. But the confusion is excusable when it is pointed out that though as a matter of fact the Reserve is mostly in notes, yet when it requires to be drawn upon, the call is generally for gold. The Banking Department, however, for its own convenience and to save the necessity of having a duplicate set of safes each capable of housing many millions of gold, prefers to

What is the Reserve?

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let the gold lie in the Issue Department and take out notes instead. If gold is wanted, all they have to do is to send a bundle of notes across to the Issue Department, when they will get the gold at once. This is the explanation of the distinction between Total Issue and Active Circulation. The latter means the total amount of notes issued by the Issue Department, less the amount held as Reserve by the Banking Department, that is to say it means the total amount of notes actually in the hands of the public other than the Bank. **Circulation.**

Table XI in the Appendix gives an analysis of the main items of the account as these are usually studied by the Money Market, and shows the extraordinary movement of these items since the War. Up till a few months before the War the average proportion of reserve to liabilities had been maintained at a little over 50 per cent. of the total deposits. The next question comes to be 'How did the Bank contrive to maintain the Reserve so steadily at that figure?' In other words, how does the Bank of England manage its Reserve, upon which so much depends? **The Proportion.**

As already mentioned, the calls upon the Reserve which the Bank must always be prepared to meet may be divided into two main classes, home and foreign. The home drains, as they are called, are for the ordinary currency requirements of the country, which inevitably fluctuate a good deal from time to time, as for example at the quarter days when large numbers of periodical payments such as rents are due, or at the half-yearly dividend days when many companies pay their shareholders. Again, a time like the August Bank Holiday, when so many people go on holiday, means a heavy withdrawal of cash from the banks to meet expenses, and this involves a considerable outflow of cash from London to the provinces. But the important characteristic of these home drains is that they are regular or periodic; their usual amount, and the time when they are expected, are well known from experience, and can be estimated with a reasonable approach to accuracy. They are therefore easily provided for, and do not cause any trouble; because the **Home drains.**

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fact must be grasped that the Money Market does not in the least mind even large sums of money being drawn out of the Bank of England's Reserve, as long as it knows where they have gone to and what for, so that it may estimate when they will return.

Foreign drains.

But with the foreign drains it is often quite different. Some, like the autumnal drain of gold to Egypt and India for the movement of the crops, are now becoming pretty well known as annual events which are looked forward to and recognized as quite normal. But there is another kind of foreign drain of gold from the Bank which is the constant care of the London Money Market because it is much more difficult to foresee when it is likely to come, or to know where it comes from, how long it will last, or what amount it will rise to, and especially when the money is likely to come back, if at all. These foreign drains are therefore very difficult to provide for, and often cause great disturbance in the Money Market, especially if some unknown drain of this sort happens to coincide with another large drain for other purposes, as the war crisis coincided with Bank Holiday in 1914. It is necessary therefore to find out the cause or origin of these foreign drains, before considering further how they affect the Reserve and how they are to be dealt with; and to do so the inquiry must be diverted to an entirely different branch of the subject, namely, foreign trade and the foreign exchanges.

GIDE, Book II, chap. x, §§ 6–8.
BAGEHOT, *Lombard Street.*
GILBART, *Banking.*
CLARE, *Money Market Primer.*
WITHERS, *The Meaning of Money.*
EASTON, chaps. vi and vii.
BISSCHOP, *Rise of the London Money Market.*
POWELL, *Evolution of the Money Market.*
ANDREADES, *History of the Bank of England.*

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CHAPTER XI

THE RATE OF EXCHANGE

International trade a return to the system of barter.—The law of the balance of trade.—Foreign bills and the Rate of Exchange.—Course of Exchange.—Variation of the Rate of Exchange.—Its effects and its limits.—Gold points.—The cause of the foreign drain.

In the inland trade of modern commercial countries the use of metallic coinage in commercial transactions has, as already explained, been reduced to a minimum. In foreign trade this tendency is carried still further. International trade is carried on almost entirely without the passing of money; it is really a return to the system of barter. Every country exports just as much as is required to pay for its imports, and imports just as much as it can buy with its exports. International barter.

It is obvious that this must be so; because if any nation were importing persistently more than it exported, and paying for the balance every year in gold, its gold supply would soon be seriously diminished. The result, according to the quantity theory of money, would be a general fall of prices in that country. What would this mean? First of all, every one would be very short of money, owing to the fall in prices and consequent depression of trade, and would be compelled to reduce his purchases, especially of foreign luxuries. Prices being now so cheap at home, it would not pay to import anything that could be bought at home, because the home prices would be cheaper than the foreign. Thus the current of importation would be checked. At the same time the cheap prices at home would tempt foreigners to come and buy, thus giving an impetus to exports. The result would be to redress the balance of trade by reducing imports and increasing Cash payment impossible.

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exports, until the excess of imports, which was the beginning of the trouble, was wiped out. It is therefore impossible for any country to be always importing more than it exports and paying for the excess in gold (except of course a country like South Africa which produces gold), and the same process reversed would apply in the case of a persistent excess of exports. The very fact of an excess either way would tend to check itself. It is like the swing of a pendulum; every swing to one extreme sets in operation forces which tend to bring the pendulum back to the point of equilibrium again.

The balance of trade.

The result is embodied in what is called the law of the balance of trade. *Every importation when it takes the form of a regular current, necessarily provokes and determines a corresponding exportation, and conversely.*

It will be apparent, however, that the operation of the theory above stated would be a slow and inconvenient process. It would be some time before the reduced supply of coinage would have its effect on prices, with the resulting compensatory action. Again, the frequent variation of the general level of prices is very bad for trade. In practice, however, the same result is reached by a more delicate and at the same time much more rapid process, known as the variation of the rate of exchange, which, though invisible and automatic, is equally certain under normal conditions.

How it works.

The system of settling accounts between foreign merchants by the exchange of bills is a development of the credit system as seen in the banks. Just as in inland trade all the merchants settle their accounts with the bank instead of with each other direct, so in foreign trade, each merchant, instead of settling with his own creditors in various foreign countries, settles with his creditors' creditors in his own country, thus saving the passing of coin, with all its necessary risks and expense.

Foreign bills.

Thus supposing that A in London buys £100 worth of cotton from B in Bombay, and grants a bill in payment, while C in Bombay buys £100 worth of goods from D in London,

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and grants a bill in payment. Suppose that the bills fall due on the same date, say January 31. Before that date A in London must remit to B in Bombay the sum of £100; C in Bombay must remit to D in London the sum of £100. But A meets D and says, 'Instead of sending £100 out to Bombay to pay B, I will give it to you in exchange for the bill payable by C which you hold. Then I shall send this bill to my creditor B, who will collect payment of the amount from your debtor C'. Thus all parties' accounts are squared without any money passing from England to India or the reverse.

In practice a middleman is employed, called the bill broker, who buys bills from all the exporters who have them to sell, and sells them to the importers, who require them to pay for their imports. In all countries except England a large part of this business is done by the banks. The bill broker's price is the rate of exchange, which is simply the price of foreign bills, and his price list is called the course of exchange.[1] For example, the rate of exchange between London and Paris is the price which a merchant in London must pay for a bill payable in Paris, or vice versa. How, then, is this price fixed?

Their price.

First of all, it must be explained how the equilibrium or normal price, as it might be called, of foreign bills between two countries is fixed; then it will be necessary to consider the causes of variation from this equilibrium, or par value.

(1) In trade between countries whose coinage is based on the same unit the exchange is the simplest possible. Between England and her Colonies, for example, where the English sovereign is the universal unit, there is really no par of exchange in the ordinary sense of the word at all, for an English sovereign is exactly the same thing as an Australian sovereign.

(2) Where two countries use different coinage units, the rate of exchange is based upon the comparative gold values of the coins which form the respective units of their coinage. The rate of exchange between London and Paris, for example,

Mint par of exchange.

[1] See Table XII.

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that is between the sovereign and the franc, is calculated thus—

One English sovereign = 7·98805 grammes of gold $\frac{11}{12}$ths fine
∴ ,, ,, ,, = 7·32238 ,, ,, pure gold.
One Napoleon (20 francs) = 6·45161 ,, ,, gold $\frac{9}{10}$ths fine
∴ ,, ,, ,, = 5·80645 ,, ,, pure gold
∴ One English sovereign = $\frac{7·32238 \times 20}{5·80645}$ francs = 25·2215 francs.

This is called the mint par of exchange between London and Paris; one English sovereign is equal to 25·22 francs.

Paper exchanges

(3) Where the currency of a country actually consists of paper, the mint par of exchange of the nominal gold unit of the currency must be calculated and then converted into terms of paper money by finding out how many units of paper money are equal to one unit of gold. For example—

One English sovereign = 5 gold dollars (Colombian)
One gold dollar Colombian = 100 paper dollars (Colombian)
∴ One English sovereign = 500 paper dollars (Colombian).

(4) Again, with a silver currency and a nominal gold unit, a similar method would be followed. But between a gold standard country and one which uses silver only,[1] there is no calculable rate of exchange at all. The rate of exchange in such a case depends mainly on the fluctuations of the market value of silver in terms of gold.

or silver.

(5) Lastly, when the bill is not due immediately, but say three months after date, an allowance must be made on the price of that particular bill to cover the interest for the period till its maturity. The long rate of exchange, as this is called, is usually quoted for three months bills,[2] as opposed to the short rate or cheque rate for bills payable immediately. The difference between these two obviously depends on the rate of interest current for the time being in the country where the bill is payable.

Short and long rates.

(6) In practice, the probability of the bill being duly paid, in other words, the solvency of the granter, must also be

[1] See the Hongkong and Valparaiso exchanges in Table XIII.
[2] See Tables XII and XIII.

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taken into account, but, as the rate of exchange refers only to thoroughly good bills, it is not affected by this consideration.[1]

The cause of variation.

But over and above all these considerations, the principal cause of the variation of the rate of exchange remains to be explained. The rate of exchange means the price of foreign bills, which, like that of any other commodity, depends on the supply and demand. The supply of bills depends on the number of merchants who have sent out goods from the country and have received bills in payment; the demand for bills depends on the number of merchants who have brought goods into the country and must buy bills to meet the price of these imports. In other words, the supply of, and demand for, bills depend on the balance of imports and exports for each country. If a country is importing more than it exports, the rate of exchange rises against that country; if it has been exporting too much, the rate of exchange falls or is in favour of that country.

Supply and demand.

Thus if France has been importing too much from England, the French merchant will require to pay more than 2,522 francs for a bill of £100 payable in London. If on the other hand France has been exporting too much to London, a bill for £100 drawn on London will only realize something less than 2,522 francs when sold in Paris.

Before proceeding to discuss the effects of the variation of the rate of exchange it is necessary to explain more fully some of the methods of the business which are very confusing to the lay mind. We speak, for example, of the rise and fall of the rate of exchange and of the rates being above or below par, but it is not always easy on looking at a course of exchange or list of rates of exchange, such as that given in Tables XII and XIII, to be sure at a glance whether a particular rate is above or below par, or is rising or falling. This is due to a peculiarity in the methods adopted of quoting the rate of exchange. Every such rate can be stated in two different ways, that is to say, it may be expressed either as the amount of *home* currency which

Method of quotation.

[1] But the two quotations for the long rate in Table XII are for two different classes of bill, bankers' bills and commercial bills.

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must be *given* in exchange for the standard unit of the other country, or as the amount of the *foreign* currency which will be *received* in exchange for the standard unit of the first country. Thus the rate of exchange between London and Paris is invariably expressed both in London and Paris as the number of francs given or received for £1 sterling. But it might just as well be expressed as the number of pence equal to one franc, i. e. 9·9*d*. Now the movement of the actual figure which is called the rate of exchange depends on which of these two methods is adopted. If the rate is expressed in foreign currency then it means the amount of that currency received in exchange for so much of the home currency, and in that case a rise in the figure means that we receive more of the foreign money for the same quantity of ours, in other words the rate of exchange has become more favourable to us. But as a matter of fact this is called a falling exchange, because it means that we have to give less of our money for so much of the foreign currency. A rising rate of exchange where the rate is quoted in foreign currency means that the actual figure of the quotation is falling, because that indicates that we receive less of the foreign currency for each unit of ours paid. Thus when the London-Paris rate is, say, 25·15, that means that an Englishman remitting to Paris will only receive 2,515 francs in exchange for £100, so that if he wants to remit the full par value of £100, i. e. 2,522 francs, to Paris he will require to pay more than £100 for the bill or draft. This is therefore unfavourable to him as a debtor requiring to remit.

Home or foreign currency.

This confusion in the manner of expressing the rates of exchange can only be avoided by constantly remembering whether the rate is expressed in home or foreign currency. It may be put for convenience in the following way:

Where the currency is	And the quoted figure is	The rate of exchange is really
FOREIGN	FALLING	RISING or UNFAVOURABLE
FOREIGN	RISING	FALLING or FAVOURABLE
HOME	FALLING	FALLING or FAVOURABLE
HOME	RISING	RISING or UNFAVOURABLE

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It will be seen that there can never be three F's in the line, or, to put it in another way, if the rate is in home currency then the movement of the exchange is direct, that is to say a rising figure means a rising rate, but if in foreign currency the movement of the rate is inverse, that is to say a falling figure means a rising rate and conversely.

Effect of rising rate.

When the rate of exchange rises against a country in this way, it means that importers must pay a little more for their bills than they expected. This is the same as if they had had to pay a slightly higher price for the goods imported. On the other hand, it means that exporters receive a little more than they expected for their bills, which is the same as if they had received a rather higher price for their goods. In other words, a rise in the rate of exchange is a penalty on imports and a premium on exports. It therefore tends to check the excess of imports and to encourage exports; it automatically tends to restore the balance of trade, the disturbance of which was the primary cause of the rise of the rate of exchange. Thus the variation of the rate of exchange tends to preserve the balance of trade.

The gold points.

But there are limits to the rise or fall of the rate of exchange. The root idea of the buying and selling of bills was to save the risk and expense of sending gold abroad. If, however, the loss incurred owing to the rise of the rate of exchange becomes very great, it will no longer pay to buy bills; it will be cheaper to send the gold after all. The rise and fall of the rate of exchange are therefore limited by the cost of sending gold from the one country to the other. The limits thus fixed are called the gold points. Thus the rate of exchange between London and Paris cannot normally fall below 25·12 nor rise above 25·32, because the cost of sending gold itself from London to Paris, or vice versa, is only about 10 centimes per £. These, then, are the gold points of the exchange between Paris and London.

The result of a rise in the rate of exchange to the gold points is that merchants, or the banks on their behalf, will remit gold instead of buying bills. This is what is meant by the expression

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Drain of gold.

that the rise of the rate of exchange against a country is unfavourable to that country; if it continues it will result in a drain of gold abroad. This, however, in spite of the word unfavourable, is not necessarily a bad thing for the country; the phrase recalls the ideas of the Mercantilists.

We return now to apply this result to the question which we were formerly considering—the maintenance of the Bank of England's Reserve. When the rate of exchange rises against London, it means that English importers will soon require to send gold abroad. But there is only one store of gold in the country, the Reserve of the Bank of England. This, then, is

Effect on the Reserve.

the cause of the foreign drain on the Bank Reserve. It is due to a call for gold to meet foreign payments, the need for such payments arising from the fact that imports have been in excess of exports; in short, the foreign drain is due to an excess of imports. How then is the Bank to deal with such a drain?

GIDE, Book II, chap. x, § 9.
CLARE, *Money Market Primer* and *A B C of the Foreign Exchanges.*
GOSCHEN, *Foreign Exchanges.*
EASTON, chaps. iv and v.
SPALDING, *Foreign Exchanges and Foreign Bills*, chaps. v–vii.

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CHAPTER XII

A FINANCIAL CRISIS

The Protection of the Reserve.—Raising the Bank Rate.—Its effect on the foreign drain and on the home money market.—Usual course of a crisis.—Suspension of the Bank Act.—The War crisis of 1914.

THE rise of the rate of exchange towards the gold point is a warning to the Bank to expect a drain of gold for foreign payments. How is the Bank to deal with such a foreign drain? There are two sides from which it may approach the question. It may take steps either to prevent gold being drawn out of the Reserve whether for home or abroad, or to induce more gold to come in from abroad.

The first course seems the simpler. The Bank might stop discounting; it might refuse to lend any more money on home discounts until the foreign drain on the Reserve stops. But this is impossible, because if the Bank of England were to refuse to lend money on its usual class of security, this would immediately be accepted by the market as proof of something seriously wrong, and would lead to the very thing the Bank wishes to avoid, namely, a crisis.

Home discounts.

To refuse gold for export is equally impossible, for London has always been the free gold market of the world; and it is largely to this that it owes its commanding position in the money markets of the world.

Gold exports.

But while the Bank cannot refuse to lend, it may take steps to discourage borrowing, either for home discounts or for export, by raising the rate of interest charged on loans. This is what is called raising the Bank Rate. The Bank Rate is the official minimum rate of discount, the lowest rate at which the Bank will lend on any security. But of recent years the Bank has been willing to lend to its own regular customers at

Raising the Bank Rate.

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the market or 'street' rate, which is generally a little lower than the Bank Rate. It was compelled to do so in order to avoid losing its customers altogether.

At the same time the raising of the Bank Rate serves the second purpose also. By common custom the Other Banks regulate the rate of interest which they pay on deposits more or less closely by the Bank Rate.[1] When the latter rises, the rate of interest on deposits is also increased, and this tempts an inflow of spare money from the country to the banks. This finds its way to London, and tends to make the conditions of the money market easier all round. The Other Banks may increase their reserves at the Bank of England or they will have more money to put out at call in Lombard Street, which means that the latter have less need to go to the Bank. Further, the raising of the rate tempts gold from abroad, because money always tends to go where it can get the best remuneration, and if the rate of interest is higher in London than in Paris or Berlin, money will flow from Paris and Berlin to London. This stops the foreign drain and may even set up a counter inflow of gold into England. Thus by one operation, the raising of the Bank Rate, the Bank secures both its objects: it reduces the borrowing on the one hand and tempts an increased supply of money from abroad on the other; and if a little time could be given for this to work itself out, there need be no alarm, and certainly no crisis. But unfortunately this time cannot always be got, because the raising of the Bank Rate causes serious inconvenience to all kinds of people at home. It means that every one who requires to borrow money not only has to pay a higher rate for it, but has greater difficulty in getting money at all, for all the Other Banks, fearing trouble ahead, begin to strengthen their position by reducing, as far as possible, the amount of money they have out on discount, at the same time as they are offering a higher rate of interest on deposits so as to tempt increased deposits. Those who are supposed to be in difficulties are the first to be cut off, their

Deposit rate.

Mobility of money.

Home difficulties.

[1] See Table XVI (1).

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loans are called up or they are refused further loans, and this may lead to their bankruptcy. Their fall involves others, and every failure makes matters worse. Business men begin to get nervous, and suspicious of their neighbours; credit, upon which the whole financial edifice is built, is beginning to fail. Merchants want payment in cash, instead of giving the usual credit, partly because they themselves are really requiring the money, and partly also because they are doubtful about the position of those with whom they are dealing. Thus the difficulty goes on increasing, until some important house, or perhaps even a bank, fails. Then the uneasiness increases to a panic, and the crisis is in full swing. The failure of one bank makes the public suspicious of the others. A mere rumour may be enough to start a run on any bank, which may bring it down. Thus public confidence is entirely upset; credit has ceased to exist; everybody wants money now.

Credit falling.

What is the effect on the Bank of England? The Outside Money Market, upon which the ordinary borrowers usually depend, is no longer available. The Other Banks have called in their money from Lombard Street, which has now no money to lend, and can only get it by borrowing from the Bank of England. At the same time, the Other Banks have reduced their lending business to the lowest possible point. Every one is therefore thrown back on the Bank. The whole lending business is now centred in the Bank of England, which is the only place where there is any money. The strain on the Bank is enormous; it has to do all the lending work of the whole market, of which it formerly had only a comparatively small share. At the same time, those who used to supply it with funds are withdrawing them. The Other Banks, for example, are requiring to draw upon their reserves deposited with the Bank of England in order to meet their own liabilities, and may even have to borrow from the Bank to tide them over a difficulty. Thus the strain on the Bank is twofold: its supplies are practically cut off, while the work it has to do has been enormously increased.

Strain on the Bank.

Position of the Other Banks.

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The Bank's policy.

And the Bank cannot refuse to lend; to do so would precipitate a crisis. It may raise the rate as high as it likes, but it must go on lending money, even to those who never came to the Bank before, and on securities which it never touched before. It must lend more freely than ever; it must do all the work of the Other Banks and the Outside Market, as well as its own ordinary business, and that at a time when its supplies are less than ever.

The Reserve, of course, sinks rapidly, and would soon be wiped out altogether if matters came to a crisis too quickly, that is, before the raising of the Bank Rate had time to produce its proper effect by stopping the foreign drain and setting up a counter influx of gold into the country from abroad. Whether this will happen or not depends mainly on the general condition of the country at the time. If trade is good, and there has not been too much speculation or inflation of prices by credit, then the chances are that the storm will be safely weathered. But if the financial position of the country is bad, if there has been excessive speculation and an undue inflation of credit, if there are many firms which are already in difficulties, then the immediate result of the restriction of the Money Market will be to bring such firms down. Uneasiness spreads rapidly under such conditions, and soon grows to panic. It is all a question of time. If things move slowly the Bank will be able to deal with the difficulty; but if they cannot get time the Reserve will be very quickly exhausted, and—what then? The lower the Reserve falls the more excited the public become, for the Reserve is regarded as the barometer of financial solvency. The Bank, then, must play for time, but on several occasions the game has failed, and the Reserve has been reduced to vanishing point. What is to be done in such a case? The strange thing about these financial crises is that, even at the worst, there has never been any sign of the public losing faith in the notes of the Bank of England. On the contrary, at such times the number of notes in circulation always increases. Every one wants money, and the notes are as good

A crisis.

Faith in the notes.

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as gold. But when the gold and notes in the Reserve are exhausted the Bank cannot pay out any more. It cannot even issue more notes, because it cannot get any more notes from the Issue Department except in exchange for gold, and it has no gold to give. The Bank, therefore, must simply stop payment. But that is impossible. The whole financial system of the country is centred in the Bank of England, and the stoppage of the Bank as already explained would mean the bankruptcy of the government and of every business man in the country, besides, probably, the bankruptcy of half the other governments of the world. The Bank simply cannot stop payment. **The remedy.**

What else can it do then? The crux of the difficulty is that the public want money, and, failing gold, they are quite willing to take notes. But the Bank Act prevents the Bank issuing more notes. The Bank directors therefore go to the government and explain the position. The government practically gives them permission to disregard the provisions of the Bank Act for the time, to issue more notes against securities, instead of gold, and promises to introduce into Parliament at the earliest possible moment a Bill of Indemnity to save the Bank from the consequences. This is called the Suspension of the Bank Act, and its effect is miraculous. The moment it is announced that the Act is suspended, the crisis collapses, and so quickly that only once, in 1857, has it ever been necessary to issue the extra notes at all. The mere intimation that the Bank Act is suspended is sufficient to calm the fears of the public and stop the crisis. **Suspending the Act.**

To sum up, the position of the London Money Market is most peculiar. It is entirely founded on credit and the actual amount of metallic money used to carry on its work is exceedingly small. As long as credit is good the system works very well. But if anything happens to impair credit the whole system is in danger. Rightly or wrongly, the public have got into the habit of regarding the Bank Reserve as the barometer of credit. When, owing to a foreign demand for gold, the Reserve falls slightly, there is no need whatever for any alarm; **The system psychological.**

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the raising of the Bank Rate would soon put things right again. But if the condition of the market and of industry generally throughout the country is not sound, the market cannot stand the strain of the high Bank Rate, and some people get into difficulties. That kind of thing only needs a beginning; one failure leads to another, suspicion becomes general, and the mischief is done. Credit is gone and people begin to want money, gold or notes, who before were quite content to take cheques or bills or to let their money lie in a bank or in some business. That is the root of the difficulty. It is not that the actual amount of money in the country has been seriously reduced. The total amount of the foreign drain is a comparative trifle. It is because, owing to the panic, people at home begin to want money who never wanted money before; it is because the demand for cash has gone up enormously, not because the supply of money has gone down.

Danger of panic.

If the public could keep cool, there need be very little difficulty, and, as a rule, if such a crisis comes when times are good, they do fairly well. But if it comes on top of dull times, especially during the reaction after a boom or period of inflation, when trade is bad, and every man is already inclined to be suspicious of his neighbour's soundness, then nothing can stop the trouble. The weaker concerns are soon exposed, and their fall may bring down others with them. So the trouble goes on till the whole country is involved.

The only cure.

And for this there is practically no cure. Careful regulation of the Reserve, keeping its amount as high as possible, tends to improve the stability of the system. But the only thing that will really alter the position is the spread of a better understanding of the system among all those who have to do with it. The more enlightened policy adopted by the directors of the Bank since the days of Bagehot has made a great difference, and the public are every year becoming better informed and less likely to cause difficulties by foolish panic. At the same time these periodic crises really serve a useful purpose. They test the soundness of the country's trade, check over-specula-

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tion or undue inflation of credit, and weed out the unsound concerns, leaving the country, once the crisis is past, in a sounder and healthier condition.

The 1914 crisis.

It is interesting to compare the course of what may be called a normal crisis in the London Money Market, as above described, with the experience of the extraordinary war crisis which swept over London and all the financial markets of the world in the memorable last week of July, 1914. That crisis was abnormal not only in its extent and seriousness, but also in its causes, and in the measures which had to be adopted everywhere to meet it.

Trouble on the Continent.

On Tuesday, July 28, 1914, Austria declared war on Serbia, and the declaration was followed immediately by a panic on all the Bourses of the Continental countries. This, however, did not at first attract very much attention in England, except in financial circles, because similar panics had taken place on the outbreak of the Balkan Wars of 1912 and 1913, and these had not seriously disturbed the world's markets outside of the Continent. The man in the street had not yet realized the danger of England being dragged into this War, and he did not see why our business world should be seriously affected by what he imagined to be purely a Continental disturbance.

Exchanges closing.

The situation developed very rapidly, however, and on Thursday, July 30, all the Continental Stock Exchanges were closed, except the Parquet or official market in Paris. That day happened also to be Pay Day of the periodical Settlement on the London Stock Exchange, and seven firms of stock brokers in London and two in Glasgow were 'hammered' or declared defaulters. The fact that one of the London defaulters was a firm with very large German and Continental connections was the first indication of the quarter from which trouble was approaching so far as England was concerned. It became known that during the period of this Settlement Germany and other Continental countries had been buying heavily on the London Stock Exchange; and, now that these

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Effect on London.

transactions had to be settled, difficulty was being found in getting the necessary remittances through to London. This difficulty was becoming general. Accepting houses in Lombard Street were not receiving the usual remittances from their debtors abroad, especially on the Continent, to meet the bills which fall due every day to an enormous total; and they were being put to serious difficulty to meet their own obligations in London. At the same time there was serious trouble on the London Stock Exchange. The heavy sales from the Continent, which had been unloading stocks to an unprecedented extent both on London and New York, these being now the only Stock Exchanges open in the world, had of course caused prices to fall very heavily. The banks, which as a rule finance so large a part of this business, became alarmed, and not only discontinued further loans on stock exchange securities, but also began to call up or reduce existing loans, which they would have had to do in any case owing to the fall in values. One of the penalties of the system of loans on a margin over the current value of securities, as

The Stock Exchange.

explained in the description of the Stock Exchange, is that on a falling market the effect of forced sales is cumulative. The lower prices go, the more shares are thrown on the market; prices are again forced down by these forced sales, and so on. This was just what happened now. The London Stock Exchange became absolutely demoralized; prices were tumbling down and no one could say what was going to happen. This inevitably reacted very quickly on the London Money Market as a whole. Every one was short of money to meet current obligations, and on going to the bank was met with restricted credit instead of the enlarged facilities required. The Discount Market was almost at a standstill by this time, and the only place where it was possible to get any money

The Bank Rate.

was at the Bank of England. When the Directors met as usual on Thursday the position was serious, but apparently they did not wish to precipitate matters by too drastic action, and they only raised the rate from three to four per cent.,

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a fact which to many people outside London seemed to offer reassurance as to the true state of affairs, though this very quickly proved deceptive. Before the day was out, however, it must have been evident to those who were well informed as to the state of affairs in London that things were much more serious than was indicated by a four per cent. Bank rate. On Friday morning the storm broke. The Settlement on the Paris Stock Exchange was postponed, which was practically equivalent to closing the Bourse, and the London Stock Exchange only opened in the morning to close again at once, a thing which had never happened before in its history. New York did the same as soon as the five hours difference of time had passed; and the crisis was at its full height. Most of the Produce Exchanges throughout the world were compelled to do the same, especially the Cotton Exchanges of New Orleans, New York, Liverpool, Havre, Bremen, Alexandria, and Bombay, and only the Wheat Exchanges, which could not be allowed to close owing to the urgent character of their supply, remained nominally open, though they were utterly disorganized by the breakdown of the financial system. The Directors of the Bank of England met again on Friday, a most unusual proceeding which has only happened once before in living memory, and raised the Bank Rate at one jump from four to eight per cent. The Discount Market was by this time practically non-existent; but the Bank of England followed its traditional policy and was still lending freely, though of course at very high rates. The foreign exchanges, which had been the beginning of the whole trouble, were in a state of the wildest confusion. To make matters worse, the difficulty had arisen at a time of the year when all the world normally owes London a great deal; in America, for example, the great wheat and cotton crops were just beginning to move, and it is with the proceeds of these crops that countries like America meet their obligations to London. It so happened that America was also specially indebted to London at that particular time, because America,

The crisis—Friday.

Discount Market.

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like the Continent, had been buying securities in London, and had now to meet these payments. As a last straw it happened that certain heavy American obligations of a semi-public character were maturing at the time, particularly a large amount due by the City of New York in repayment of an issue of bonds, many of these being held in London. Thus America, like the Continent, was requiring to remit unusually large amounts to London, and the rush to obtain remittances on London became unprecedented. The foreign exchanges had already begun to establish records by the Thursday. After that all quotations became absolutely nominal.[1] Exchange was practically unobtainable, and the most extraordinary offers, such as 6½ dollars per £ instead of the normal 4·86, were said to have been made without avail. One ship was dispatched with gold for London, but being a German ship she had to fly for a neutral port before she was half-way across.

Foreign exchanges.

The sudden rise in the Bank Rate was the first intimation to the general public of the serious character of the crisis, but before this became generally known they were beginning to feel the difficulty in another and very peculiar way. The August Bank Holiday was approaching—it fell on Monday, August 3, and as usual most people in London were going on holiday on the Thursday or Friday before it. Where they went to the bank to draw money for their expenses they were taken aback to find that the banks would only pay in Bank of England notes, which are of course legal tender in England. Now, for ordinary holiday expenses a five-pound note, which, it will be remembered, has been since 1826 the lowest denomination of bank note available in England, is far too large; and the holiday-makers wanted change, that is to say, gold. But some of the Joint Stock Banks, apparently desiring to conserve their balances of gold, actually refused to give gold, referring their customers to the Bank of England for change; and on the Friday the unprecedented sight was seen of long queues of people waiting at the Bank to get change for their

Scarcity of change.

[1] See Tables XIV and XV.

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notes. Nothing contributed so seriously to the popular idea of the gravity of the crisis. It began to be suspected that for the first time in history the public were becoming uneasy about the Bank's notes. Such a suspicion, had it been well founded, would have been the end of all things; but fortunately it was not so. All that was wanted was change, and the sudden restriction of the gold supply at a holiday season brought to the front, what Scotchmen had long preached, the inconvenience of having nothing in England like the Scotch one-pound note. But the difficulty, though not so tragic as it at first appeared, was serious enough. By the Friday change for a five-pound note was almost unobtainable anywhere; and it was said that in London restaurants people could not get food to eat because they had nothing less than a five-pound note in their possession with which to pay for it.

Queues at the Bank.

But if the Bank Holiday contributed to the difficulties of the position in one way it saved the situation in another. On Saturday morning the City was practically in a state of collapse. The Bank Rate was raised to ten per cent., not so much because that made any great difference to any one, but rather because it is by way of being a tradition that the Bank Rate should go to ten per cent. in a serious crisis and especially before the Bank Act is suspended; and so far that was the only course that any one could conceive as the way out of the difficulty. The Discount Market was at a standstill, partly, at least, owing to the action of the Other Banks in refusing loans and calling up their money, though, as will be seen shortly, there was a deeper cause than that also at work. But the Bank of England was still lending freely, though at maximum rates of discount; the Reserve was sinking, and it seemed to be only a question of time when it would be exhausted, if things went on as they were doing. In any case, Saturday being a short day, followed by the Sunday and then the Bank Holiday on Monday, gave the financial world and the government time to turn round, measure the situation, and decide what was to be done to cope with it.

The Bank Holiday.

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The first business was to be clear as to the cause of the crisis, and there was fortunately no difficulty in putting one's finger on a single fact which was at least the immediate cause of the trouble. In one way the crisis was like others that had happened before: it was due to the complete collapse of the world's credit system, which indeed is just what a crisis means, in one form or another, in every case. The credit system, as has been pointed out, is a highly nervous organization, its action or failure being due very largely to psychological causes, and, whatever may be the immediate cause of any crisis, its development generally follows the same lines; the failure of credit produces similar results whatever may have been the cause of the breakdown. But the interesting point in this case was the cause of the first breakdown, and it was in this respect that the crisis of 1914 was markedly abnormal, and indeed unique. The beginning of the trouble usually is difficulty in London owing to a withdrawal of gold on foreign account, but in this case it was the reverse; it was the action of the Continental banks in refusing to part with their gold for remittances to London which paralysed the foreign exchanges and made it impossible for Continental debtors to remit to London. The moment that happened all the rest followed inevitably. The object of the foregoing account of the World's Money Market system has been to make clear its extraordinarily complex character, to show how every section of it is closely inter-related with every other, and how every one depends on every one else for the due fulfilment of current obligations. A can only pay B if C pays A punctually, and so on. Now the first effect of the inability of the Continental debtors to pay their bills in London was that the Accepting Houses, who had guaranteed these bills to the Discount Houses, were faced with immediate bankruptcy, because, as their remittances had not come to hand, they could not pay their creditors, the Discount Houses. At the same time the failure of remittances from the Continent to members of the London Stock Exchange made the stock brokers unable to fulfil their obligations to their

Immediate cause of the crisis.

Action of Continental banks.

Effect on Lombard Street.

On the Stock Exchange.

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fellow members in connection with the purchase of shares, and sent them post haste to the banks and large Discount Houses to borrow money on these shares to carry them over, if they could not sell them. Again, the Continental debtors, in their honest desire to pay their debts to London, turned to the only other alternative—they tried to sell shares in London; but the pressure of these sales at once began to depress values on the London Stock Exchange and produced further difficulties. As soon as prices began to fall seriously the Other Banks necessarily began to call in their loans and sell out their 'cover'. At the same time they found it necessary to reduce their loans on securities; and it is reported that many of them even withdrew loans which they had arranged to give for the Settlement. For the banks were suddenly finding themselves very badly pinched at another point. Their bills discounted were not being met when due, owing to the failure of the Accepting Houses to meet them, which in turn was due to the failure of their remittances from abroad. Thus the banks were compelled to reduce their new loans on discounts, because their daily supply of money was not coming in as usual. But worst of all for the banks was the fact that owing to the disorganization of the Discount Market they were unable to get in their Call Money from Lombard Street, and in this way their most liquid asset was suddenly frozen and not available. It was a very serious predicament indeed in which the banks found themselves, and any criticism that may be made of their action in the crisis must be tempered by due recognition of the fact that their position was really almost desperate. For they had to face the risk, indeed it was almost a certainty, of a run on them by their depositors, which would have been inevitable by the beginning of the week, not so much because their customers had lost faith in the banks, but simply that their current requirements for cash, swollen by the sudden collapse of credit, would very quickly exhaust the available resources of the banks, reduced as these now were.

On the banks.

Fear of a run.

It was therefore a very difficult situation all round which had

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to be faced, and the government found it impossible to devise and carry out the measures necessary to meet it even in the time made available by the Bank Holiday. Their first step, therefore, was to declare a prolongation of the holiday for other three days, which in effect was equal to a complete moratorium for that period, for during Bank Holidays no bill can be presented for payment, nor can any steps be taken to enforce payment of practically any obligation whatever.

Extended Bank Holiday.

Relief to Accepting Houses.

The first task which lay before the government and its advisers was to relieve the Accepting Houses from their impending bankruptcy. This was done by a partial moratorium issued on Sunday, August 2. But this was only passing the burden on to another branch of the Market, namely the Discount Houses, and anything that would relieve them could only be at the expense of the Market generally, especially the banks. The position of the latter was so precarious that practically nothing but the right to refuse payment to their own creditors would meet the difficulty; but that, of course, was again only shifting the burden on to the shoulders of the general public. Thus there was nothing for it but to proclaim a general moratorium, and this was done on Monday, August 3.

General moratorium.

The next step was to meet the sudden need for actual currency, especially small change. There was no time to discuss the best way to do this: it was simply a question of finding some method which could be adopted quickly enough to meet the emergency. Even the provision of the necessary stock of the right kind of paper was a difficulty, and finally the machinery used for printing Bank of England notes was turned on to a stock of the paper usually employed for postage stamps, and an emergency currency of £1 and 10*s.* government legal tender notes was ready for issue when business was resumed on the Friday after the prolonged Bank Holiday. This new stock of 'money' enabled the government to solve two difficulties at once. It met the public need of change; and it enabled the government to lend large sums of money to the banks to meet any possible rush that might take place on them when they

Paper currency.

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reopened. But no such rush took place; everything passed off quite quietly and the first stage of the crisis was over. The Bank Act was not officially suspended in the ordinary sense of the word, but a clause was inserted in the Currency and Bank Notes Act which practically gave the Treasury power to suspend the Act themselves at any future time if necessary, thus avoiding the necessity for an Act of Indemnity on each occasion. The Bank Act.

But these measures marked only the first stage of what was required to deal with the crisis. They were simply emergency measures to stop the panic: they did nothing to remove the root causes of the crisis, which, as a matter of fact, had not yet reached its full development. For the outstanding fact which must be emphasized at this stage was that up till Saturday, August 1, when the first stage of the crisis was at its height, the War had in a sense not begun at all. No two of the Great Powers of Europe had actually declared war upon each other till Russia and Germany led off on that date; and at that time it was still by no means certain that England would be involved in the War at all. On the contrary, there was a very strong party in England which would have resisted England's participation in the War to the utmost, had it not been for Germany's invasion of Belgium, and that did not become a public certainty till the Monday. Thus the crisis was essentially a pre-War crisis up to this stage; and the point to be emphasized is that it would have happened just the same even if England had never come into the War at all. England was involved in the crisis not because she was to be one of the belligerents, but because London is the centre of the world's financial system. A pre-War crisis.

But before these first measures were in force England did find herself inevitably involved in the War, and the second stage of the crisis had begun. The effects of the declaration of war upon the industries of England were bound to be very serious. In the first place the government practically commandeered the whole railway system of the country for mobilisation purposes, and for a few days it was almost impossible to Declaration of war.

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move goods of any kind, except military, from one part of the country to another. At the same time shipping, upon which England's industries so largely depend, was practically at a standstill. This again was due to causes of a semi-financial character. The ordinary marine insurance policy held by shipowners and merchants to cover the risk of loss of their ships and goods at sea, does not cover war risks, which are specially exempted by the terms of the policies. When, on the first rumours of war, owners rushed to cover their property against the extra risk, the facilities available for insurance even in London, which is the centre of the world's marine insurance business, were very rapidly exhausted, and even before the declaration of war by England, marine insurance against war risks was practically unobtainable. When war was actually declared the situation became simply a deadlock. No one knew how things were going to turn out, what naval strength in fighting ships or armed merchantmen Germany might have at large, or what success the British navy would have in dealing with them or in bottling them up. For a shipowner to send a valuable ship and cargo to sea uninsured against war risks under such circumstances would have been courting disaster, and most of the owners, except in the case of the regular lines, postponed their sailings till events would develop. Ships at sea made for the nearest port, and those in port remained in safety awaiting developments. Thus even if it had been possible for manufacturers and exporters to get their goods to a shipping port, there was no possibility of getting them away, and this of itself would very quickly have brought trade almost to a standstill.

Marine insurance.

Effect on shipping.

Perhaps the most regrettable feature of these early days of the War was the food panic, for it can hardly be described in milder terms, which swept over the country, and which, though it was very quickly checked, had one most interesting result. It has been pointed out in Chapter III that the result of the development of highly organized modern markets is to produce a remarkable uniformity of prices throughout the area of the market. But under the strain of war conditions this system,

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so far as retail prices were concerned, broke down completely for a time. Prices were all at sixes and sevens; shopkeepers did not know what to charge for their goods, because they did not know what it would cost them to replace their stocks when these were exhausted, and in many cases they found it impossible to replace them at all for the time being. Purchasers were at the mercy of the shopkeepers, some of whom simply charged whatever prices they thought they could obtain. It was a complete reversal of the ordinary conditions of the determination of market price in England, under which as a rule the prices of most commodities are fixed by cost of production. The system in normal times works by competition through the common knowledge on the part of every one, both purchasers and shopkeepers, of what every one else is charging. But under the rapid changes from day to day, and even hour to hour, which were now taking place, it was hardly possible for the shopkeepers even to know what their immediate neighbours were charging. Left pretty much to himself, each man charged what he thought fit; and the result was that the uniformity of prices which was always regarded as characteristic of Western methods almost disappeared. Prices were mainly influenced by demand rather than supply, and the shopkeeper regulated his charges more by what he thought his customers would pay than by the price he himself had paid for the goods. It was a striking revelation of the extent to which the fixing of prices in normal times had become simply a matter of custom.

Food panic.

The effect on the position of the large manufacturing industries of England was much more serious. At first no one knew what to do, and most people took the precaution to restrict their commitments as much as possible by cancelling delivery orders for goods, wherever it was open to them to do so, and placing no new orders. The manufacturers in many cases did not object to cancellation, because they did not know what to do for raw materials, which were undeliverable even if it had been possible to buy them. Many of the cotton manufacturers, for example, could only get delivery of their raw cotton by

Effect on industry.

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sending motor wagons to the docks or stores for it, over long distances in many cases. But the trouble was not so much the impossibility of getting goods as the difficulty of knowing what price it would be safe to pay for them. Prices of course fell very rapidly at first, except in the case of those goods directly required for war purposes, such as woollen materials, leather, &c. In the cotton trade, for example, the position was very serious. Every one expected that the trade would have a very bad time, unemployment was at first very serious, and the price of the raw material fell so alarmingly that no one could tell where it would stop.

Lack of finance.

To add to all these difficulties the manufacturers found business almost paralysed by the difficulty of getting their usual financing facilities. The banks were still in a serious difficulty, for though the moratorium had stopped the panic, it had not touched the root of the matter, which was that so much of the money usually available for carrying on the financing of the country's trade was locked up in the Discount Houses on the foreign bills which could not be realized. The same cause affected foreign trade in another way, because, owing to the breakdown of the Accepting House system, no new foreign bills could be negotiated, and foreign trade was for a time almost impossible. The result of all these adverse conditions was very soon shown in the published statistics which reflect the condition of trade.

Unemployment and trade.

Unemployment statistics rose very fast in practically all but war trades, and the Board of Trade figures of exports and imports began to fall off ominously.[1]

To meet these difficulties the government very quickly devised a number of expedients which, whatever may be the final verdict of history as to their theoretical soundness, at least reflect credit upon the originators for their boldness and promptitude. The key-note of the whole was State intervention; and in one thing after another the State shouldered responsibilities which had become too great for private enterprise. The first of these to be announced was the undertaking

[1] See Table XX.

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of marine insurance against war risks by the State. The government undertook to cover any venture to the extent of eighty per cent. of its value, at rates which though high enough —they began at five guineas per cent.—were eagerly accepted by shipowners. These rates must have proved very profitable to the government too in the long run, for the losses at first were exceedingly small; and the government were able to lower the rates gradually till, on December 31, 1914, they were reduced to one guinea per cent. State insurance.

The next problem was how to relieve the Money Market and the banking system of the country from the incubus of the foreign bills. Again the government came to the rescue with the heroic proposal that they, through the Bank of England, would take over the whole of these acceptances from the Discount Houses without recourse; that is to say, that they would take the risk of these bills being ultimately paid by the principal debtors, who were in most cases the Accepting Houses. This the government did by authorizing the Bank of England to rediscount the bills at a rate of two per cent. above the Bank Rate, which immediately after the first rush of the crisis was over had been reduced again to five per cent. Of the seven per cent. the government were to take $2\frac{1}{2}$ per cent. as their insurance premium for bearing the risk, while the Bank received the remaining $4\frac{1}{2}$ per cent. as interest, which, considering that they had the government's indemnity against loss, was quite sufficient. It was estimated at the time that the responsibility which the government were thus shouldering might run to as much as £350,000,000, and as a matter of fact it is now known that bills to the value of more than a third of that sum were actually brought to the Bank; but the final result of the transaction was to justify the government's action, for it is estimated that the great majority of the bills were duly met at maturity. In this the government gave some further assistance by lending funds to the acceptors who could not recover from the ultimate debtors in enemy countries owing to the War. Relieving the Discount Market.

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By this measure the government at once set free a large amount of the funds locked up, and these should have enabled the Discount Market and the banks to resume business; but it is doubtful how far the desire of the government to rehabilitate the financing system of the business world was given effect to in the subsequent action of the banks throughout the country. At any rate, the worst of the difficulties were tided over, and business of some sort became possible again, though it was very far from justifying the popular cry of 'Business as usual'. The moratorium was nominally continued till October 4, but few of the banks and not many business men ever took full advantage of it.

Reopening the Exchanges.

Other measures were quickly elaborated to deal with different sections of the business world. Thus the Stock Exchanges were finally reopened, under strict government control at first, however, in the way of minimum prices fixed by the government, and with government assistance to the stock brokers who found themselves saddled with heavy unpaid liabilities from Continental debtors. At the same time the government introduced a new control over the exploitation of the capital resources of the country in war time, by prohibiting the flotation of any new company or loan without the approval of the Treasury. Similar measures to those required in the case of the Stock Exchange were gradually extended to other produce markets, such as the Cotton Exchange in Liverpool, brokers being offered financial assistance by the government to enable them to meet their obligations. But the extent to which all these facilities were made use of by the various sections concerned was surprisingly small.

Gold reserves abroad.

One of the difficulties which had to be faced at an early stage was the collapse of the American Exchanges, which are so closely related to the cotton and wheat industries. An ingenious expedient was adopted to meet the difficulty of getting gold from America to London, by transferring it to Ottawa in Canada, where, being in British territory, it was by a legal fiction accepted as being lodged in the Bank of England,

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thus enabling its original owners in America to draw on London against it. A similar arrangement was subsequently made for Australia and South Africa.

This then brings the history of the great crisis down to a point at which we must leave it for the time to follow another line of argument, which again will bring us in touch with the further effects of the War. The crisis began with the breakdown of the foreign exchanges, owing to the refusal of the Continental banks to part with their gold, and that at a time when the Continent, like other parts of the world, happened to be peculiarly heavily indebted to London, so that the effect of the refusal was particularly severe. It has been pointed out in the chapter on the foreign exchanges that the final resort of an indebted country when the exchanges go against it, owing to a temporary excess of indebtedness, is to redress the balance by an export of gold. It may be doubted whether in this case the balance was not far too heavy to be wiped out in that way; but in any case the determination of the Continental banks not to give gold for export brought matters to a head at once. The action of these banks was quite consistent with their policy, which had been well known to the financial world for many years, of laying up a large reserve of gold against this very contingency of war. Germany, for example, was believed to have collected a large store of gold in the fortress of Spandau to be used in case of war; and it is not surprising that, when war actually came, the first step of the Reichsbank should have been to close down their gold supplies and absolutely prohibit any drain upon them. Whether such action was well advised or not, will hardly be doubtful to English ideas. It certainly produced the very effect which every one should have striven to prevent, namely the precipitation of an extreme crisis, which might have been alleviated, if not prevented, had other nations followed the traditional policy of England in giving gold freely, though at a high price, in times of incipient crisis. It is conceivable that Germany adopted the course she did with malice afore-

Continental gold policy.

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thought, believing that the crisis would do more harm to England than to herself with her large store of gold. The truth of the matter will probably never be known, and it is doubtful whether abstract discussion of what happened, or what might have happened under other circumstances, is of much value. Most of the facts are now fairly well known, and the lessons to be drawn from them for the future guidance of the world's financial system will require careful consideration after the War is over. In the meantime it remains to consider the further effects of the War in its progress upon that system; and in order to do that it is necessary to go on to another aspect of the question which, as already explained, lies at the root of the whole matter of the foreign exchanges, namely the balance of trade. For the foreign exchanges are only the means of adjusting a small excess of trade one way or the other, and so maintaining the normal balance of each country's trade. But the War completely upset that balance, not only in the case of all the belligerent countries, but also of practically every neutral country in the world. The financial problems of the War are bound up with that question, and the theory of the balance of trade must therefore be examined in further detail before returning to deal fully with these secondary effects of the War.

Balance of trade.

BAGEHOT, *Lombard Street.*
WITHERS, *The War and Lombard Street.*
WITHERS, *International Finance.*
Emergency Legislation. Official volumes.

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CHAPTER XIII

THE TEST OF THE QUANTITY THEORY

Was it true before the War?—The facts of the gold supply and prices.—How does it work?—Money of all kinds and credit.—The gold control of credit.—The War experience.—Why prices have risen.—Paper money.—Credit inflation.

IT is time now to return to the question with which we began, and to which we have been seeking an answer all through the argument, viz.: Is the Quantity Theory of Money true? Does the general level of prices depend on the amount of money in circulation, and particularly does it depend to any extent on the total gold supply or on the amount of gold in use as money? It will be useful first to review the apparent facts of the position, and see whether they bear out the theory sufficiently to make out a *prima facie* case. The main facts will be found in Tables I and V in the Appendix. The former gives such information as is available as to the world's gold supply and the accumulating stock of gold since 1493; the latter gives the Index Numbers since 1782. To bring these together, the two sets of figures must be plotted down on a diagram side by side,[1] and on doing this it will be seen that there certainly does seem to be a considerable degree of correlation or causal connection between the two in modern times. Thus there was a marked rise of prices in the early 'fifties, when the increased gold supply from California and Australia began to make itself felt in the world. The great fall of prices from 1873 onwards has already been explained as due in large measure to the fact that the joint supply of gold and silver money, which had before then been available as legal tender throughout the world, was suddenly reduced by the demonetization of silver. The world's demand

A *prima facie* case.

History since 1860

[1] See Diagram C.

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for standard coinage was thus thrown upon gold alone, and the gold supply being insufficient to meet the whole demand for money, especially as those demands were so largely increased by the enormous expansion of trade and industry of all kinds and in every part of the world which marked that period, the money supply became quite insufficient for the amount of money's work to be done, and the result is shown by the severe fall of prices from 1873 to 1896.

After 1873.

The turn of the tide in 1896 and the marked rise of prices which has been almost continuous since then coincides with the increased gold supply from South Africa, the Klondike, &c. The short-lived fall of prices in 1901–3 again coincides with the temporary cessation of the South African gold supply during the Boer War.

Since 1896.

These facts then are sufficient to show at least a very remarkable coincidence between the world's gold supply and the general level of prices, which would probably be regarded as quite convincing were it not for the difficulty of accepting the supposed supremacy of gold, in face of the fact which has been brought out in the preceding chapters that gold itself, and indeed money of any kind, plays such an exceedingly small part in the enormous volume of the world's monetary transactions. It is difficult to believe that the exceedingly small proportion of gold can have such a controlling effect as the theory would seem to require. Of all the money's work of this country, for example, the enormous proportion which is done without any gold at all, that is to say the amount of payments made by cheque, &c., where no money passes, has been shown by the figures of the annual turnover of the Clearing House—£16,000,000,000 worth of money's work done in a year without the passing of a single sovereign, and our whole supply of gold coinage in the country probably barely exceeds one hundredth part of that total. Even if we add the whole amount of our token money and bank-note issues to this money total, the aggregate is still very small in comparison with the amount of 'money' of another kind

Doing without gold.

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represented by the deposits in the banks of the country which before the war amounted to over £1,100,000,000.

The answer to this argument, however, lies in the immediately preceding chapters on the Money Market and the nature of a financial crisis. The argument of these chapters has been directed throughout to showing the remarkably centralized character of the world's Money Market—how the London Money Market, which is in a very real sense the centre of the world's financial system, is in its turn centred in the Bank of England, whose whole system is centred in the control and management of the Reserve. The Reserve, as has been shown, is the financial barometer of the London Money Market, and, through the movement of the Bank Rate, its rising and falling controls to a remarkable extent the value of money, not merely in London but also in all the other money markets of the world, and in this way it controls the movements of gold throughout the world. The eyes of the financial world are therefore always centred upon the Bank of England Reserve. Now, of what does that Reserve consist? It is gold; and although the total amount of it is so small, yet its importance is infinitely more than proportionate because it is the only free gold supply in the world, and as a matter of fact the great bulk of the world's gold supplies passes through it.

The gold Reserve.

It may therefore fairly be argued that this small central reservoir of gold is really in a quite extraordinary degree the controlling factor in the world's gold supply, and therefore in the world's supply of credit, which in every country is based more or less directly on some form of gold reserve. It may seem incredible that such a small amount of actual money should exert such a mighty influence upon the whole system of credit, but the fact is that it does exercise an altogether disproportionate influence because of the way in which the system is pivoted upon the Gold Reserve. This gold reserve is, as it were, the bottle-neck through which the whole volume of credit must pass. One could easily imagine a totally different system under which the expansion and contraction of credit would be

The bottle-neck of credit.

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manipulated or controlled in some entirely different way,—we have had some experience of such a system during the War,—but in the meantime the fact remains that that was how our credit system was controlled before the War; and that fact alone is enough to explain the indirect effect of the gold supply upon the whole credit system, and therefore upon the general level of prices. It may therefore safely be laid down that as far as the normal conditions of the financial world before the War were concerned, the Quantity Theory of Money had been proved substantially true.

But while the essential truth of the theory may now be taken as established, it would be a great mistake to imagine that it can be applied in any definite or precise way to any particular set of circumstances so as to enable us to dogmatize quantitatively as to the expected results of any particular change in the gold supply. The whole discussion of the system has been directed to show that the influences which modify the effect of a certain change in the gold supply upon the general level of prices are so extraordinarily complex that such attempts are bound to be almost worthless. There are so many factors in the problem, so many disturbing causes which may throw the effects almost completely out of gear with the theory, that any attempt to prophesy, for example, what the effect of a particular rate of increase of the gold supply will be upon prices are almost bound to fail; even if they happen to hit the mark, they have no right to claim anything more than a lucky guess. For in the first place it is almost impossible to be accurate as to the world's effective supply of gold, even assuming the available statistics of the annual output to be absolutely correct, because the first question is how far the working of the theory depends on the amount of gold bullion produced or the amount turned into coinage. As a matter of fact, the Reserve contains both gold bullion and gold coins of all kinds, and it is by no means to be taken for granted either that it is only the proportion of the world's annual crop of gold which is turned into coinage that matters, or on the other hand that the whole gold supply counts, irrespective

Quantitative application impossible.

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of how much of it is used for purposes other than coinage. Second, as the world's supply of gold is a stock, not a crop, it is impossible to dogmatize as to the effect of a change in the annual supply upon the total amount of gold in use in the world as currency. Difficulties of measurement.

Again, it is difficult to say how far the amount of token money in circulation might modify the effective amount of gold in the country. If, for example, the people of the country took it into their heads for a time to use silver much more largely than they had done for money payments, it would release a considerable quantity of gold for other purposes. The same applies to the use of notes. A marked increase in the use of small notes instead of gold would have the same effect as an increase of the supply of gold. Thus in Scotland before the War, a peculiar change had been coming over the practice of the cashiers in large factories as to the way in which they paid their men's wages. In the old days each man's pay was put into an envelope, and generally consisted of a pound note and the odd shillings and coppers. But in recent years the custom had grown of putting the pay into small tins set in a frame, and it was found much more convenient to put in a sovereign than a pound note. Such a trifling change in the habits of a class which handles a large sum of money every week might mean a considerable change in the effective demand for gold for ordinary currency purposes. Token money. Notes.

Further, it is impossible to be accurate as to the extent of the superstructure of credit which is at any particular moment standing upon the foundation of gold. The only figure we can take is the amount of the Bank Deposits and perhaps the Clearing House turnover, but these, as will be seen shortly, are by no means an accurate quantitative index of the state of credit. Credit.

Finally, it is impossible to measure with any approach to accuracy the extent of the demand for money, that is to say, the amount of money's work to be done in the country at any particular time. It depends not merely upon the amount of goods of all kinds produced in the country, but also upon Money's work.

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the number of exchanges which must be made of these goods in the course of their passage from the producer to the ultimate consumer, and both of these are almost impossible of measurement.

To attempt, therefore, as has been done by certain writers, to state the Quantity Theory of Money in the form of a definite equation, and then to fill in actual statistical measurements for the various factors of the equation, seems to be straining the Quantity Theory far beyond its capacity for practical application. It can never give more than an approximation to the probable effect of a certain increase of the gold supply upon prices. Like all economic laws, it is only a statement of a tendency, and almost incapable of quantitative measurement.

War prices.

It must next be asked whether the experience of the War has had any effect upon the theory either in the direction of confirming it or otherwise. Certainly the facts are sufficiently striking, and at first sight they seem entirely incapable of any explanation which would be in the least consistent with the theory. For the facts are, as will be seen from Table VI in the Appendix, that the general level of prices has risen since the War beyond all experience in modern times, while the gold output has remained practically as it was before the War. So extraordinary has been the rise during the years 1915 and 1916 that the Index Number in 1916 was higher than it has been since 1819, though still not so high as it was most of the time during the Napoleonic Wars (see Table V).

Obvious causes.

It is of course obvious that there is no need to go to any theory of money supply for an explanation of the greater part of this rise. Direct causes are staring one in the face, such as the increasing cost of all raw materials, due partly to the high rates of freight which have become universal owing to the scarcity of tonnage, and this has extended not merely to freight by sea, but also to the cost of carriage by land. Again, owing to the risk of submarines, the cost of marine insurance has been very substantially increased, while the risk of Zeppelin raids in certain districts may have done something in the same way for fire insurance on land. But the chief item of increased

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cost in most cases has been the labour cost. Wages of all kinds have risen materially, which, of course, is bound to affect the prices of the goods in which labour forms a large proportion of the cost of production. Again, interest on capital has been steadily rising, owing to the enormous demand for capital for War Loan purposes, and this has been reflected in the higher rate of interest which all kinds of industrial concerns have had to pay for any new capital raised, while the financing facilities granted as in normal times by the banks to business of all kinds have inevitably risen in cost in the same way. This increased cost of capital has had its effect on the cost of all machinery, which must also bear heavier interest charges than formerly. Further, there is very little doubt that in many cases the price of particular articles has risen abnormally simply because the supply was short. Actual scarcity may not have been responsible for the rise of prices as a whole, but there are bound to be cases under the conditions of a war of such magnitude, with all its interference with normal supplies, where, for a time at least, the supply of a particular commodity practically runs out, and the fortunate producer or dealer who happens to possess a good stock can charge whatever price he likes, or at least the highest price he thinks his customers will pay. And though these instances have perhaps been exceptional, yet it is certain that they have contributed in no small degree to the aggregate rise.

Rising costs.

Passing from these comparatively obvious causes of the rise of prices, there are many theories afloat as to other causes, all of which do come within the scope of the quantity theory. For example, it has been freely alleged that the rise is due to the increased issue of paper money, and to an excessive inflation of credit by government financing of the War in the shape of War Loans, Treasury and Exchequer bills, &c.

Paper money.

The first of these theories may be comparatively easily disposed of. In the first place, the facts which will be found in Table VII in the Appendix show that the total increase of currency due to the issue of paper money was only some

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£120,000,000 up till the end of 1916. It must be remembered, too, that quite a considerable number of the Treasury notes have gone abroad; they are found in every port from Gibraltar eastwards, and probably wherever else the sovereign used to circulate; and, as a matter of fact, they were actually surcharged and used as local currency in Egypt for a time, during a severe scarcity of the local coinage. But even the total amount would probably not have been enough under present circumstances to produce any excess, for two reasons.

Increased currency requirements.

In the first place, the circumstances of the War are in every way unique, and it is probable that one effect of the changes has been to make people use money in one form or another a great deal more than they formerly did. For example, the needs of the army must have involved the circulation of a very large amount of actual money in the country. Again, wages are higher, separation allowances are being paid to soldiers' and sailors' dependants to the extent of £80,000,000 per annum, it is said; there is far more money being earned and spent by the working classes, many of whom are finding themselves with more money in their hands than they have ever known before. But the working classes do not keep banking accounts; their monetary transactions are all done in hard cash, and in this way a much larger amount of money is required in the country to-day than was formerly the case. Finally, it seems hard to believe that there could have been any marked rise of prices due to the excessive issue of paper money (which is equivalent to the depreciation of the paper money) without there having been some disposition on the part of the public to prefer gold to paper, and any signs of such a tendency are entirely wanting, either at home or abroad. The paper money has maintained its value absolutely, and that is not to be wondered at in view of the essential fact that the Treasury notes are in the last resort convertible into gold at the Bank of England, though sensible and patriotic people have never shown the least desire to convert them, but have given up the gold habit completely for the duration of the War at least.

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The idea that the rise in prices is directly due to excessive issues of paper money may therefore be regarded as not yet proved. It is not so easy, however, to deal with the other theory that the rise has been largely due to the inflation of credit by methods which are in some way, seldom very clearly stated, connected with government finance. Here again the facts tend to give some support to the argument, for, as will be seen from Table IX (1) in the Appendix, the total amount of deposits in the British banks since the beginning of the War has increased from £1,104,329,700 in 1913–14 to £1,405,386,000 in 1915–16. This of itself does not necessarily involve an increase of credit facilities, which would amount to inflation, but there are two ways in which it is said that such an inflation may have taken place. In the first place, when the government stepped in to remove the block which had stopped the working of the financial system by taking out of the market the whole of the acceptances which had not been paid owing to the War, and subsequently by enabling the responsible parties to find the money to clear off these liabilities, they could not, of course, make any distinctions between those which would have been duly paid by the debtors at maturity and those which would not in ordinary course have been paid off, because they are what is known as finance bills, that is to say bills which go on being renewed from time to time as they fall due, representing a permanent loan of capital by the holder of the bill to the other party or parties. Thus there is no doubt that a considerable part of the business of certain foreign banks (in Egypt for example) was financed by such bills more or less permanently, and it was due to their inability to renew these bills that the Bank of Egypt failed in 1911. Now when these bills were paid up with government assistance in 1914–15, it actually gave the money market more money to work with than it had had before, at least so runs the theory on this point.

Credit inflation.

The discount market.

Again, there is another way in which government finance may have contributed to an excessive creation of extra credit. The huge War Loans which have already been floated and the

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issue of Treasury bills, Exchequer bonds, &c., have certainly meant the creation of a large amount of first-class securities upon which money can be borrowed with great facility. It is argued that when a man who has taken up such securities, that is to say who has lent money to the government, which the government of course has spent on war purposes, finds it necessary later on to raise money himself, temporarily perhaps, for his own business purposes, he has nothing to do but take a bundle of War Loan certificates out of his safe and pledge them to his banker, when he will immediately receive credit for their amount or a substantial part thereof. Thus the creation of these securities has, it is said, added to the loanable credit of the country, at least to the extent to which such a method of employing them has been adopted. That, however, it is impossible to measure. It is probably comparatively small[1] in this country, though in Germany such financial expedients have been very largely resorted to by the government themselves in their efforts to finance the War.[2]

War securities.

The need of finance.

It is, then, impossible to say to what extent the actual increase of bank deposits represents the real increase in the credit facilities of the country, and how far that increase has been in excess of the requirements of the country, for here again it must be remembered that the other side of the account is almost incapable of statistical measurement. For who can tell in the meantime what has been the total volume of the country's industry and production during the War? That it has been enormous is beyond question. Before the War it used to be estimated that the national income of Great Britain was not less than £2,250,000,000 per annum. Since the War began not many of our industries have shown any material reduction in their turnover, as far at least as that can be estimated in values, for, owing to the rise of prices, the value of

[1] Something may be inferred from the very slight increase of Bank Discounts in 1914, followed by the fall in 1915. See Table IX (4).

[2] Another argument for inflation, founded upon the increased investments of the banks themselves in War Loan stock, will be found in the *Economist* Banking Number of Oct. 21, 1916.

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their output has often risen, though its quantity may have fallen a little. This, of course, is including what is now, unfortunately, the greatest of all our industries, the making of munitions. What the value of the output of that industry may be, no one as yet knows; the information is naturally not made public. But it is quite certain that it is enormous, and it is very likely that when the total is added to the output of all our other industries during the War, we shall find that the aggregate of our national income during the War has increased by a very considerable percentage, probably to at least £3,000,000,000, to hazard a guess. In view of such a possible increase of trade and business, there must be a much larger need for credit and financial facilities of all kinds; and it is by no means certain that the increase of the deposits represents anything more than what would be required for this purpose.

Summing up.

The long and short of it is that no one can tell, and one opinion is worth no more than another on a question where the facts are not merely obscure but almost unascertainable from their very nature. Historians of the War may be able to form a better opinion fifty years hence than we who have lived through it, and the only conclusion that one can draw at present is that at least nothing has happened yet as the result of the War which would in any way alter our belief in the substantial accuracy of the Quantity Theory of Money, so long as it is kept within its proper bounds as the mere statement of a tendency. When the world's gold supply shows any marked change in either direction there is likely to be a corresponding effect on the general level of prices; but any cause which materially alters one of the other factors in the effective force of money in its widest sense, may seriously qualify the result. One further point only need be indicated as something to be carried forward to the future as the result of the war experience. Reference has been made to the extraordinarily powerful control exercised before the War by the relatively small amount of gold in the Bank of England Reserve upon the world's credit system. It may well be that as a result of the War we shall learn to look upon gold with much less reverence as the

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The position of gold.

all-powerful controller of credit. We have seen that in war time gold may cease to be the always desirable adjuster of balances between nations; and that it is even possible for our creditors to decline payment in gold, as America did at times when our shipments of gold to the other side began to accumulate in an embarrassing way upon their hands. The United States have no use for gold in actual currency. Perhaps after the War other nations may find that they have learned the same lesson. In any case the immediate resumption of gold payments will be an utter impossibility to many nations whose paper issues during the War have been so large, and perhaps the world will get so used to doing without gold that it will never want to come back to the old sway of gold again. What effect will that have upon the controlling power of the little reservoir of gold held in various national hoards throughout the world over the general state of credit? It has been shown in the chapter on paper money that the ideal currency would be an international paper currency regulated by an international committee with one eye constantly upon the Index Numbers, and ready to increase or reduce the amount of the international paper currency in circulation at any time as the Index Numbers indicated the necessity. Under such a system what would be the importance of the gold reserves as affecting the general level of prices?

Such questions must be left to the future to settle. In the meantime all that can be done is to indicate as far as possible what changes have already taken place during the War, and leave it to the future to show what new conditions and new systems may arise out of the ruins of the old. We of this generation had learned to understand a little, and to appreciate a great deal, the wonderful complexity and efficiency of the old system. Its ruins are still more or less sacred to us, and it is not easy for us to believe that a better fabric may arise out of them than that which came down about our ears so tragically in that memorable last week of July 1914.

WITHERS, *War and Lombard Street.*
HIRST, *The Political Economy of War.*

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CHAPTER XIV

THE BALANCE OF TRADE

The law of the balance of trade.—Customs returns of imports and exports.—Invisible exports and imports.—International trade of Great Britain.—Effect of the War upon the world's trade.

ACCORDING to the law of the balance of trade, as explained in Chapter XI on the rate of exchange, the exports and imports of every country must balance each other. Every country exports just as much as it requires to pay for its imports, and imports just as much as it can buy with its exports.

Apparent discrepancy.

But on examining the actual customs returns of exports and imports of any country, they do not seem to bear out this law at all. On the contrary the customs returns of England, for example, given in Table XVII in the Appendix, show that before the War she imported annually nearly £150,000,000 more than she exported, while those of the United States showed that they exported about £100,000,000 more than they imported. What is the reason of this apparent discrepancy? It is quite evident that such enormous balances could never be paid in gold, in the first place because the total supply of gold in the United Kingdom would be little more than enough to pay for a single year's excess of imports; while on the other hand, America would, in the course of a few years, have attracted to herself half the gold in the world. There are, of course, countries like South Africa which produce gold as one of their commodities for export, and in such a case we find a steady outflow of gold, which is their means of paying for their imports. Again, it is true that in every country there are occasional exports or imports of bullion which serve to redress a temporary excess of imports or exports of other commodities.

Gold-producing countries.

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Seasonal movements.

Egypt, for example, had before the War a periodical inflow of gold in the autumn, and outflow in the spring, which corresponded to the seasonal swing of her trade, from a great excess of exports (chiefly of cotton) in the autumn, to the opposite excess of imports of manufactured goods in spring. England, on the other hand, had a continual but fluctuating movement of exports and imports of bullion, because England is the world's free gold market. A large part of the world's annual production of gold finds its way to England for sale and distribution to the other financial centres which require it, or can afford to buy it.

All this, however, does not alter the fact that the great bulk of the trade between nations is barter and not cash sales, and that the apparent normal excess of imports in some cases, and exports in others, is squared by some other items of indebtedness between nations which, though they do not appear in the customs statistics as goods, are nevertheless effective payment for goods, and therefore render payment in gold of the apparent balance unnecessary. We have next to consider, therefore, the nature of these invisible imports and exports, as Sir Robert Giffen first called them, to find out their character and probable amount, and why they do not appear in the customs statistics. In the meantime, however, they may be defined as follows: *An invisible export is something that enables a country to import goods without paying for them directly by the export of other goods*, and conversely, *an invisible import is something which makes it necessary for a country to export goods without receiving payment directly in other goods.*

The true balance.

Customs statistics.

First, then, it is necessary to consider how the customs statistics of exports and imports are made up. Every ship that enters or clears from a British Customs Port (and no ship may enter or leave the country by any other than a customs port) must make a declaration of the quantity, value, origin, and destination of the cargo, and that whether duty is payable upon the cargo or not. As our import duties were before the War confined to a comparatively small number of articles, these

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declarations frequently involve no payment, but the returns made are the basis of all our foreign trade statistics. This is, of course, the only possible method of checking the movement of foreign trade, but it obviously fails to catch and record the passing of certain kinds of goods, which will affect the balance of indebtedness between nations. Thus, for example, it does not touch the ordinary passenger's luggage, nor the money in his pocket. Still less does it take account of the letter of credit in his pocket-book, the proceeds of which will provide the expenses of his stay in the country. Again, it does not touch the ordinary letter mails of the Post Office, and if any one cares to risk sending small articles of value by letter post (against the regulations) they will escape the customs net. The Parcel Post, however, passes through the Customs House, which takes toll of its contents.

Leakages.

But all these omissions are trifling compared with certain other items which from their very nature must escape the customs system, because it is based on the passage of corporeal goods through a given point. These items are services rendered by the members of one nation to those of another, and which have no corporeal existence, or which may be rendered entirely outside of the customs area of any country, namely on the high seas. The greatest and most obvious of these is the service of carriage or transport. Transport of goods from one country where they are produced in such abundance that they cannot be consumed, to another in which they cannot be produced but can very readily be consumed, is an essential part of the process of production of a valuable commodity, and as such must be paid for; the goods at the end of the voyage are actually worth more than they were at the beginning. These services then, which result in an increase of value, must be paid for out of that increased value, and their value will be payable to the owner of the ship which renders them, in whatever country he may have made his head-quarters.

International services.

Shipping.

Now England owned before the War about one-third of the world's mercantile marine, and her share of the world's shipping

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trade is larger even than is represented by the proportion between British and foreign ships entering her own ports. For many of her ships are doing the world's work of carrying, not merely from British to foreign ports, but between other ports abroad. A tramp steamer, for example, leaving a British port with an outward cargo, may carry many foreign-owned cargoes from one country to another, before she finally picks up a cargo which brings her home again to a British port; or even on the homeward run her cargo may be for Antwerp or Hamburg, from which port she will return 'light' to a home port, to load outwards again. Or having delivered her outward cargo in New York or Baltimore, she may be chartered by American owners to carry cargoes back and forward between say New York and the West Indies, and may run up and down in that trade for years, till it is time for her to seek a homeward cargo again, that she may undergo her survey or periodical overhaul. Many British lines, such as the British India Steam Navigation Company, maintain a whole fleet of coasting steamers plying to and fro between foreign ports, and some of these steamers have never seen a British port since they first left one on their maiden voyage.

England's share.

All this means money due to the British shipowner for freights, and the payment must find its way in some form to London or Liverpool, where the owner's office is. In the old days, the owner's freight was often paid in a share of the cargo, and the legal right of retention or lien over the cargo, which the owner and master still enjoy for their freight and disbursements, is founded on the fact that they are entitled to payment *out of the value of the goods* for the share in that value which they have created by their services. It is, in fact, out of the price realized for the cargo that the freight is ultimately paid; and the effect is that the full value of the goods as they appear in our customs returns of imports is only partially covered by the export value of the goods which are sent abroad in return. Thus, to take an imaginary transaction, on a double voyage between Manchester and Alexandria goods worth £1,000

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shipped from Manchester, would appear in the Egyptian customs returns as worth £1,100 (the extra £100 being added for freight, &c.). In payment for these goods, the Alexandria merchant will ship a load of cotton worth in Alexandria £1,100, knowing that on arrival at Liverpool it will realize £1,200, and thus provide funds not only to pay the Manchester warehouseman the amount of his bill for the original consignment, but also to pay the Liverpool shipowner the freight of £200 on the double voyage. Thus, England has exported goods valued at £1,000 and received in exchange goods valued at £1,200, leaving an apparent excess of imports of £200.

The world's balance of trade.

This difference between export values and import values is the explanation of the puzzling fact that the world's total figures of exports are apparently less than the world's total imports. This is, of course, obviously impossible. As a matter of fact, many a cargo that leaves port never reaches its destination, and the toll of the sea must be paid in both gold and goods, as well as human life. The explanation of the apparent mystery is, of course, quite simple when the fact of the added value due to the service of transport is taken into account. Apart from the probability of inaccuracy in the returns made to the customs authorities, which would naturally tend to an under-valuation of imports, because customs duties are as a rule heavier on these than on exports, the discrepancy is due to the difference between what are called F.O.B. and C.I.F. values. The declaration of value made by the exporter when the goods are put on board is naturally based on the value at that point, that is to say the original price of the goods plus the cost of carriage to the ship's side and of placing them on board, and this is known as the value 'Free on Board'. But the value declared by the importers when the goods arrive at their destination is the value at that point, namely the original cost of the goods when they were placed on board, plus freight, insurance, and any other charges incurred on the voyage, i.e. 'Cost, Insurance, and Freight'.

Customs valuations.

The amount of these freight services in the course of the

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world's trade of a year is very large, and various calculations have been made as to Great Britain's share in it. Sir Robert Giffen in 1882 estimated it at not less than £60,000,000, and in 1898 at £90,000,000, while another calculation on quite different lines put forward by the Board of Trade in 1903 made it £89,500,000. It is now probably well over £100,000,000.

Reference has been made to the charges incurred for insurance of goods at sea. This recalls another class of similar payments for services rendered in connection with foreign trade. In addition to freight and insurance, goods have to be financed, sold, and paid for, and the modern complexity of this work has called into existence a whole class of traders or agents of various kinds, who look after these parts of the work for the foreign owner, and are remunerated by various forms of commission.

Commissions.

Thus, in addition to commission agents so called, who buy and sell goods on commission, there are, in London especially, great numbers of financial and commercial men whose whole business is the handling of foreign trade in one way or another. Thus, for example, the payment for exports and imports is usually made by a foreign bill of exchange, which passes through the hands of several bankers or bill brokers, for acceptance, discount, or collection. All of these different agencies, which our elaborate financial system has called into being, are remunerated by a small fractional commission or profit on the transaction. Again, London does a very large Stock Exchange business, especially in international securities (which are themselves, at times, an important factor in the balancing of international indebtedness), and in the flotation of loans, government or private, for foreign countries as well as the British Colonies, and all this involves the payment to London stockbrokers and financial houses of commissions, which aggregate a very large amount in the course of a year.

Marine insurance.

With regard to marine insurance, a very considerable share of the whole world's business, including insurance both of hulls and cargoes, is done in, or through, London; for though a ship may be 'underwritten', as it is called, in Hamburg or Trieste,

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or in New York, the risk is in most cases at least partially transferred by reinsurance to a London underwriter, and this means a premium payable by Germany, Austria, or America to London. Again, the ordinary fire insurance business of all the world tends to gravitate to London, where most of the large companies have their head offices, with the result that London generally holds the largest interest in any loss, either marine or fire, that may take place in any part of the world. Fire insurance.

All these items are in themselves comparatively small, but so enormous and widespread are the financial interests of London, which has been called the Clearing House of the world, that the total amount payable in a year is very large indeed, and under this heading it has been estimated that London earns probably at least £20,000,000 per annum.

In connection with the shipping industry there is another item which, though comparatively less important, does at times involve a considerable claim by Great Britain against foreign countries, namely the sale of British ships at sea to foreign owners. Not only does Great Britain build new ships for all the world, but British shipowners frequently sell their older vessels to foreign owners, building new ships to take their places. In every port of the world one can recognize ships flying a foreign flag, which from their build were obviously once British. Old liners, which owing to the increasing demands of the travelling public are no longer up to modern requirements, are sold to foreigners, who convert them into tramps or cargo steamers, in which capacity they are still good for many years' service. If such a sale takes place while the ship is in a British port, the transfer is duly recorded in the British shipping register, and when the ship leaves this country for her new service, the consideration is recorded in the customs returns. But if a ship has left a British port, flying the British flag, and is sold to foreign owners while on the high seas or in a foreign port, there is no such record of the sale; and as such transfers are at times very numerous, the effect is to create a considerable indebtedness by foreign countries to Sale of ships.

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Great Britain. It is, however, impossible to place any reliable estimate on the amount of this claim, which, of course, varies greatly from time to time.

Boarding expenses.

Again, another item which may seem trifling but yet is of considerable importance to certain countries, is the amount expended by tourists, either in the country by foreigners, or by that country's subjects in foreign countries. Under this heading, for example, countries like Egypt, Italy, and Switzerland are creditors of all the world to a considerable extent, while the United States at the other extreme is heavily debtor. In our own case, the claim probably balances itself, as we usually have a sufficient number of visitors from foreign countries to set against what we owe to others for the entertainment of our travellers.

How repaid.

The method by which this indebtedness is created and discharged is interesting. The ordinary tourist does not carry with him a bag of gold sufficient to pay the expenses of his trip. He leaves home with only a small amount of cash in his pocket for the expenses of his journey, having paid to Cook's or a shipping company, or a foreign railway agency here, the bulk of his travelling expenses, including even hotel coupons. For his personal expenses while abroad he carries a sheaf of circular letters or letters of credit, or a banker's draft, addressed to some bank in the country of his destination. In exchange for these railway or steamer tickets and hotel coupons, he receives board and lodging and transportation, while his letters of credit provide the cash with which he pays for all the services of various kinds rendered to him during his visit, including the price of the curios or trinkets which he buys and brings home, but which incidentally, being as a rule of small bulk, pass through the customs as part of his personal baggage, and are not thought worthy of record by the customs authorities, except in the United States. But for all these services rendered to the strangers within her gates, Egypt must be paid or credited. The letters of credit, for example, which the tourist has cashed in Cairo are returned to London, where they are

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placed to the credit, say, of the National Bank of Egypt at its London office, and are available to meet the bills payable for the English manufactured goods which Egypt imports. The result is that a country like the United States must export goods to meet this claim for the entertainment of her subjects abroad. In Egypt, it has been estimated that this item amounts to at least £1,000,000 per annum, a considerable item to a country whose annual imports average about £30,000,000. In Italy and Switzerland the figures were put as high as £14,000,000 and £5,000,000 respectively, while the annual debit of the United States under this head was estimated at no less than £20,000,000.

But probably the largest single item of invisible international indebtedness is due to the flotation and repayment of foreign debts, both interest and capital. On this point the world may be roughly divided into two great classes, debtor countries and creditor countries, namely those which from the point of view of industrial progress are young and requiring capital for their development, and those older-established industrial countries like England which provide the means for that development, and the necessary capital to finance it. Thus, for example, India, Egypt (which from this point of view is the youngest of countries), Australia and New Zealand, the United States, and the Argentine Republic have at various periods, say since the middle of the nineteenth century, received from England large sums of capital for railway development, harbour construction, irrigation works, and all kinds of productive expenditure, as well as for public works of a less directly productive character, such as public buildings or armaments; and the amount of these advances is now represented by national or private debts of all kinds, such as government stocks and bonds, railway and land companies' shares, and all the other forms of public and private indebtedness. The method and the effect of the creation of these huge items in the balance sheet of nations are of a double character. When in the first place a loan is raised in London, say for the construction of an Argentine

International borrowing.

Double effect.

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A new loan.

railway, the amount of the loan is not exported in boxes of gold to the borrowing country. As a matter of fact the bulk of the money never leaves England, but is simply placed to the credit of the foreign government or company in the books of the Bank of England, from which it is almost immediately paid out again in the form of cheques to the engineers or bridge builders who have already supplied the goods for which the loan was intended to pay. Thus the loan is given in the form of goods which appear in the customs returns of the exports of the lending country, and go to swell the statistics of exports for that year, without any corresponding entry of imports in payment therefor. There is, therefore, for the time being an apparent excess of exports by the lending country, and a corresponding excess of imports by the borrowing country. But in subsequent years interest will require to be paid on the loan, and at some future date it must be repaid either in a lump sum or by instalments spread over a period of years, and this repayment, whether of interest or capital, can only be made in the form of goods. In the case of productive expenditure—such, for example, as that of the construction of the Assuan Dam in Egypt—the source of payment is obviously the additional cotton crop due to the increased water supply, so that the loan pays for itself in exports of cotton. Thus the effect upon the borrowing country's balance of trade is to create in the year that the loan is raised, an apparent excess of imports which is balanced by the invisible export of the debt in the form of the loan certificates. But in future years the borrowing country's exports must be in excess of its imports, to an amount sufficient to meet the interest charges on the debt, which thus becomes an invisible import (of interest coupons) to that amount. Again, when the loan comes to be repaid, this also will tend to swell the exports of the debtor country for that year.

Debt charges.

Repayment.

The general effect is that, if we find the customs returns of any country showing an apparent excess of exports, we are fairly safe in believing that that country is a debtor country.

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Effect on balance of trade.

And if, as frequently happens, we find a country which we know to be largely in debt actually reducing its normal excess of exports, and even running up for the time an excess of imports, it simply means that that country, instead of living within its income as it were, and duly paying its debt charges, is actually incurring further debt every year. Thus, in Egypt, for example, where the normal figures of the customs returns should show an excess of exports of at least £5,000,000 per annum, such an excess was actually maintained from the early 'eighties till about 1900. Then the normal excess of exports began to diminish rapidly, until in 1904 and 1906 there was actually a balance the other way. From 1900 to 1906 the imports of goods rose from £14,000,000 to £24,000,000, while during the same period the net imports of gold rose from £1,500,000 to £7,000,000. The meaning of this was that owing to the enormous prosperity of the country, due to the high price and the increasing crops of cotton, the people of Egypt found themselves in a position to borrow freely, England, France, Belgium and Germany competing eagerly for the privilege of lending the money. The result was, in the first place, a tremendous acceleration of the agricultural development of the country, which was all to the good; but unfortunately this led to an inflation of values of every kind, especially in land, and a fictitious prosperity which very soon showed itself in lavish expenditure on all kinds of European luxuries, such as motor-cars and champagne. The result was the crisis of 1907, due to the sudden withdrawal of this excessive credit, and an abrupt and painful return through the crisis to a more normal state of affairs. But it will take Egypt many years to wipe out the increased burden of additional debt so unnecessarily taken upon her shoulders in these years of exaggerated prosperity.

The case of Egypt.

In this matter of international indebtedness, England of course occupied before the War a unique position. Her industrial development being more than half a century in advance of all the world, enabled her to become the world's creditor, while at the same time it provided the inducement to every

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England's investments.

other country to borrow from her. Her manufactures quickly found their way to all the ends of the earth, while her colonizing instincts made her quick to realize the possibilities of development of the new countries which her new inventions in the means of transport and communications were bringing within easy reach of the Old World. British emigrants began to spread over every habitable quarter of the globe, and wherever they went, they saw opportunities for development which only required capital to convert them into wealth, and England found the capital. Thus British capital led the way in the development of the resources of every part of the new worlds, east, west and south, from Canada to the Argentine, throughout Africa, and in India, Australasia, China, and Japan, with the result that there is not now a country in the world in which British interests are not engaged. In the latter half of the nineteenth century other European countries began to follow suit, and the scramble for colonies was nothing more than the visible effect of their desire to share in the development of the unexploited resources of the world.

Her dividends.

The result is that England became the creditor of all the world to the extent of some thousands of millions sterling[1], and is continually receiving payment of interest and repayments of principal under old loans and still making new loans all the time. It was estimated by Giffen in 1898 that under this head England was then receiving about £90,000,000 per annum and before the War the total was probably over £120,000,000.

It remains now to sum up the result of all these various elements which go to make up the balance sheet of Great Britain's various accounts. Indeed, the idea of a balance sheet is perhaps the best way to bring out the whole situation, for it gets rid at once of the confusion of mind due to the apparent distinction between visible and invisible imports or exports. Visible and invisible imports alike go to the debit side of the account, while the exports visible and invisible

[1] The total was estimated by Sir George Paish, in a paper read before the Royal Statistical Society in 1910, at £3,180,000,000.

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appear together on the credit side, and the result, based on the figures of 1912–13, is something like the following: The balance sheet.

Dr.	£ *Millions.*	*Cr.*	£ *Millions.*
Total imports . say	750	Exports, home produce . say	500
Tourists abroad . . .	10	Re-exports, foreign & colonial	110
New loans abroad . .	200	Freight	100
		Interest on loans abroad . .	120
		Repayment of loans	100
		Commissions	20
		Tourists	10
	£960		£960

It will be seen that the final result of all these items of our foreign trade is to bring out the fact that instead of England importing more than she exports, which has frequently been misrepresented as showing that we are living on our capital, England has all along been living so far within her income that she has a steady annual balance which enables her to continue making new loans out of her annual surplus. Not living on capital.

One more point remains to be explained before leaving this subject. While the total exports and imports of each country must on the whole balance each other from year to year, it does not at all follow that the exports and imports passing between any particular pair of countries will balance each other, even taking into account the invisible exports and imports. Thus, taking again the case of our own trade with Egypt, the excess of imports which we take from her in the form of our share of her cotton crop is much greater than the amount necessary to pay our share of her annual debt charges, both public and private. The truth is that trade between nations is not conducted in pairs, but that the circle of exchange is world-wide. England may export manufactured articles to a country from which she imports relatively little, but she takes payment of that excess from another country which owes her nothing, but which is debtor to England's debtor. The transaction is like the theoretical form of the bill of exchange, A being a creditor of B, instructs him to pay the money to C, who is A's creditor. Triangular trade.

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No one debtor has paid his own creditor, but all the creditors are paid, and, as has been seen in previous chapters, the analogy of the bill of exchange is not merely a simile, but is the actual form by which the transaction is carried out.

It may seem rather surprising that during recent years it should have taken so much argument to carry conviction to some minds of the truth of this law of the Balance of Trade. There is perhaps an explanation of this difficulty in the fact that the word 'balance' itself contains a double meaning, which is exceedingly confusing. In popular use, the word means either of two things which are the direct negatives of each other. To say that an account balances, means that both sides are equal in amount; but if one side is greater than the other we speak of the balance, meaning the excess, being on that side. When therefore we speak of a balance of imports, we mean something entirely different from the balance of trade. The 'balance' of trade means that there can be no 'balance' of exports or imports, because these two must 'balance' each other. To avoid this play upon words, it is better not to use the phrase 'balance of exports or imports' at all, but to speak only of an excess of imports or exports, reserving the word 'balance' for use in its true meaning of equilibrium or equality of exports and imports. This distinction in the use of the terms is not merely a question of literary criticism, but represents the historical development of the theory of international trade, from the time of the Mercantilists who first used the phrase 'a favourable balance of trade' as meaning an excess of exports. Their theory has been abandoned, and it would have saved a great deal of confusion of thought if we could have abandoned their terms entirely and spoken only of the equilibrium of foreign trade, and the excess of exports or imports.

Balance or excess.

War and the balance of trade.

It remains now to consider the effect of the War upon the balance of England's trade. It has been seen that its first effect was to dislocate our foreign trade very seriously for the

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time being, but gradually, as the emergency measures came into force, things began to readjust themselves, and business was resumed under difficulties. Shipping began to move again fairly freely as the risk of capture was seen to be comparatively small, and the first sign of the recovery of trade was the free movement of the great crops of raw materials such as wheat and cotton from America to this country; which incidentally soon served to remedy the confusion into which the American exchanges had fallen at first, and to enable America to pay its debts to this country. Gradually things settled down again and most of our industries resumed something like their normal appearance. Some did so more quickly than others because any shortage of normal demand for their products was more than made up by the increasing pressure of demand for war goods of all kinds. Thus the woollen industry had been very busy from the first in turning out uniforms of all kinds in enormous quantities. The boot and shoe and other leather trades were in the same position, and soon another enormous new industry began to develop in the wholesale conversion of all kinds of engineering works to the production of the fabulous quantities of munitions which were to be the chief characteristic of this war. The effect of all these tendencies may be traced, with certain qualifications next to be noticed, in the Monthly Returns of Imports and Exports which will be found in Table XX in the Appendix. The general effect of these may be briefly stated here as follows: At first all categories of our trade, both imports and exports, and of every class of goods, showed very serious reductions, but within a very few months a new tendency began to show itself. Our imports, especially of food supplies and certain raw materials, stopped falling, and soon began to show actual increases upon the pre-War figures. Exports were much slower, but in course of time they also began to improve, and finally by the month of May, 1916, the total exports were also above pre-War figures. The general movement of our trade can best be shown by a diagram, and this will be found in the

First effects.

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The figures. Appendix. Diagram B shows the actual figures of exports and imports month by month during the years 1913 to 1917, with a straight line drawn through each year representing the average for the year, and showing the general effect at a glance.

In studying these figures, however, several points require to be kept in view, for the figures must be handled with great caution to avoid the most deceptive conclusions. In the first place it must be noted that the figures available for the country's trade as a whole are only value statistics, because it is impossible to give figures which would show the volume of

Values only. trade as a whole.[1] That can only be done for individual commodities. The effect of this may, however, be indicated, though it is almost impossible to calculate it exactly. The very heavy rise of prices of most staple commodities must be taken into account, and its effect estimated as far as possible. It means that the enormous figures to which our imports have attained must be so heavily discounted that as a matter of fact the total volume of our import trade now is probably not much more than it was before the War. Our exports, on the other hand, which have only lately begun to show figures comparable with the pre-War levels must be very far below the corresponding quantities before the War.

War supplies. This again, however, is only half the truth. The figures of exports and imports do not represent anything like the whole of the quantities of commodities which are coming into or going out of the country, because they do not include the whole of those imports and exports which are government property, and which now form so large a proportion of our foreign trade.

The relative effect of this omission upon our imports and exports is all the more difficult to estimate because we do not even know exactly what is and what is not included in the published figures. Thus government stores, that is to say, war supplies of all kinds, which leave this country for the front in transports, are certainly not included, and probably munitions

[1] But see Table XXI, which only became available as the above was going through the press.

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of many kinds brought to this country in ships chartered by the government also do not appear. But government supplies coming to this country in other ships probably are, and certainly raw materials which are going to be turned into war materials in this country do appear in the statistics. On the other hand, it is not easy to ascertain how far the enormous military supplies which we are sending to our Allies everywhere are declared, so that it is impossible to know how far our true balance of total exports and imports may be from the proportion indicated by the published returns. It is very probable, however, that the export figures suffer more largely from this cause than the imports, so that on the whole, perhaps, this factor would tend to counterbalance to a very considerable extent the apparently increasing excess of imports which our trade statistics at present show.

Imports worse.

Exports better.

The only possible way of estimating the effect of these invisible exports and imports of a new kind is to make a guess based upon the total war expenditure. In doing so, however, it must be remembered that the value of our exports of war materials to our own troops abroad can hardly be included as exports in the sense of placing them to the credit of our balance of trade, because these are after all payable out of our own pockets, and constitute no claim by us upon any foreign country for subsequent repayment. There is, however, one way in which we may estimate the extent to which we are piling up claims against our Colonies and our Allies, which will in the future stand to our credit. We are lending to our own Colonies and our Allies now at the rate of nearly £500,000,000 per annum, and it is probable that a very large proportion of this is going out in the form of war supplies, such as uniforms, boots, engineering materials, and war munitions of all kinds. We are, of course, receiving very large quantities of munitions and raw materials of all kinds from neutrals, especially America, but the probability is that the most of these are included in the published returns, while the others are not.

How much.

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Bullion movements.

Again, to make the figures even as complete as they can be, another item must be taken into account, namely the movements of bullion. On this point it must be recalled that since the War much of the gold which really belongs to England has never been actually brought into the country at all, but is or was lying to the credit of the Bank of England in Ottawa, Cape Town, and Sydney. The possible effect of this upon the figures may be inferred from one fact alone, that during 1915 we imported almost no gold at all from the Transvaal, the output of which has been going on steadily as before, and certainly has not been going anywhere else.

A new orientation.

Taking all these cautions and reservations into account, what do the figures indicate as regards the balance of our trade since the War? Simply this, that our foreign trade has undergone an entirely new orientation, just as the main object and character of our home industries have undergone a complete change. It is certain that our home production of wealth, including munitions of all kinds, has increased very materially since the War. That is obvious from the fact that there is to-day hardly a man, woman, or machine idle in the country, that unemployment in the old sense of the word has disappeared, that many people, especially women, are working who never worked before, and that most people are working overtime to an extent absolutely unprecedented. In the same way probably our total foreign trade, if only the true figures were known, has also increased very materially if war materials are included. But its direction has changed. Just as now in our home trade so large a proportion of our productive capacity is being devoted to the wasteful production of war materials, so our foreign trade has been completely turned into new channels. We are now importing largely from countries to which we used to export, and vice versa. To take one case as an example, our trade relations with America have completely changed. The enormous quantity of munitions and raw materials which we are taking from her is no longer balanced by the large quantities of our own manufactured goods which we used to send to her.

America as creditor.

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We are running into debt to America very seriously, or rather America is rapidly repaying to us the old debts which we had accumulated against her for many years, in the form of money and goods lent for the development of the country. We cannot for the time being pay her in goods as we go along, and by one of the paradoxes of the War we can no longer pay her for this excess in gold, not merely because we have not enough gold to do it, but because she does not want so much gold. We are paying America by selling back to her the securities of all kinds which our people held in American concerns: hence the Treasury scheme for the mobilization of American securities in this country with a view to their being sold to America or used as securities for loans raised there to pay for our supplies. The same principle is being applied to other countries, e.g. the Argentine Republic, and probably elsewhere.

Our position after the War.

But while we are thus in a sense running into debt, or at least living on our capital, in our relations with these neutrals, we are on the other side running up enormous new claims against all our Allies, the total amount of which will probably more than counterbalance our losses on the other side. When the War is over our balance of trade will be very much as it was before, except that we shall have very largely changed our debtors.

Incidentally it is interesting to speculate upon the probable effect on America's future balance of trade of the changed conditions which will result from the War. Ever since she was a nation at all she has been a debtor nation exporting considerably in excess of her imports every year to pay the interest charges on her old borrowings from England and Europe generally. But now that interest charge will be greatly reduced, because America by the end of the War will probably have repaid at least £1,000,000,000 to the Allies. That means a reduction of at least fifty millions per annum in the debt charges due by America to the old countries, which means quite a substantial difference in her exports. What will America do with the difference? Will she take so much more of imports from Europe and continue to send out the same quantity of

Future effect on America.

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exports as before, or will she reduce her exports, and retain a larger share of her own crops for her own consumption? During the War she has pretty well answered the question by retaining a very much larger share of her cotton crop than she has ever done before. If she continues to do so after the War, it will make a considerable difference to the Lancashire Cotton Industry.

Other neutrals.

The position of other neutrals as the result of the War is likely to prove very similar to that of America. They are all supplying goods as fast and as much as they can to the belligerents and running up huge credits against them for the values, which will make a remarkable difference in their relative trade positions after the War.

As to the effect upon our Allies the result of this movement will of course be to leave them very largely in debt to us, and to other neutral countries for all these war supplies. Most of them will be able to pay in course of time; some of them

Our Allies.

we shall hardly expect to pay us, such as Serbia and Roumania; while for some of them, especially Belgium, the only hope of being able to pay lies in the recovery of an indemnity from Germany. France will be our largest debtor in all probability, unless perhaps Russia, and there will be no question of their ability to pay: France will do so very quickly as she did after the war of 1870, and Russia more slowly perhaps. But Russia is accumulating a huge asset in her dammed-up exports of wheat, which the whole world will be scrambling for, the moment peace is declared, or the Dardanelles opened.

Effect on invisible exports.

Again, it is interesting to note the probable effect of the War upon our invisible exports and imports. The amount of these is always largely guesswork, and more so now than ever, but some indications may be obtained from various facts. In the first place as to freight: a very large proportion of our mercantile marine has been commandeered for transport purposes, and its services are therefore no longer an invisible export, except in so far as they are carrying war materials, &c.,

Shipping.

to our Allies. But for the remainder, which is still at some-

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thing like its ordinary work, though the quantity of tonnage has been considerably reduced by submarine losses, apparently the earnings of what remains are very much above pre-War levels, if we may judge from the high dividends paid by shipping companies of all kinds. As for the other usual items, tourists' expenses may be treated as non-existent since the War, but they will swell very rapidly again as soon as it is over, and the battlefields of Europe become the happy hunting-ground of the American tourist.

Reference has already been made to the extra cost of insurance of all kinds, especially war risks both on land and sea, and as before a very large part of that business has been done in London. Our banking and other commissions too have probably not been materially reduced on the whole, though a great deal of business must have gone to America. But what we have lost in one way we have probably more than made up for by our share of the business which formerly went to Germany and Austria. Much of their trade has come into our hands, and the profits follow the trade. Commissions.

The only item that has been seriously affected is probably, as has been seen, the lending of new capital to the world. We certainly have had to restrict our new loans to foreign countries almost to vanishing point, and that not only has a serious effect on our balance of trade during the War, but will have a permanent effect on our balance afterwards; but it must be remembered that these two effects are counteracting. If we are not lending so much new capital in the meantime, we are not requiring to export so much against the new loans, so that that alone would set off some reduction in the normal quantity of our exports. Capital.

Finally, it follows that all this tremendous interference with the normal pre-War course of our trade and the settling down of our trade into new channels which are themselves becoming normal again, at least for the duration of the War, have naturally affected the foreign exchanges very materially. The American exchanges soon recovered from the pre-War crisis, and rapidly Foreign exchanges.

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turned the other way against us, as the current of exports began to flow. And that is typical of the position of all the exchanges since the War. All our exchanges with neutrals are against us, because we are receiving more goods from them than we can export to them at present. On the other hand, all the exchanges between us and our Allies are heavily in our favour, because they are receiving far more from us than they can send us.

The position of the other belligerent countries as regards their exchanges is practically the same. All the exchanges are against Germany, and to an infinitely greater extent than in our case. But the reasons for that include one which fortunately we do not require to reckon upon, viz. the depreciation of their paper money. Some idea of the extent and character of these movements of the foreign exchanges may be gathered from the figures given in Tables XII to XV in the Appendix.

GIDE, chap. vii., §§ 1 and 2.
GIFFEN, *Economic Enquiries and Studies.*
SMART, *The Return to Protection*, chaps. iii and iv.
BOWLEY, *The Effect of the War on the External Trade of the United Kingdom.*

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CHAPTER XV

THE THEORY OF INTERNATIONAL TRADE

The advantages of foreign trade.—The theory of comparative cost.—Free trade *v.* protection.—A question of policy not principle.—Its application to various countries.—Arguments in favour of protection, and objections.—Import duties and bounties.

IT has been shown that the value of the exports and imports of each country must on the whole balance each other, unless a country is debtor or creditor of other countries, either for capital borrowed in the past or for services rendered from year to year. It may then be asked, what is the good of foreign trade if both parties give and receive exactly the same value? What is the gain to either?

Object of international trade.

In this respect foreign trade is the same as trade between individuals. What is the good of any exchange if each party to the exchange receives only an article of the same value as he gives? The answer is that, while the exchange value or price is the same, the subjective value of the articles exchanged is different to the two parties. So in foreign trade, while the money value of exports and imports to each country is the same, that does not represent the whole advantages of the exchange. The theory of foreign trade is very like the theory of the division of labour. Each nation should produce those things which it can produce to the greatest advantage, just as in division of labour between individuals each individual should be put to the work he can do best. The causes of these differential advantages between nations vary greatly, but in most cases they can be expressed in some form of the idea of cost of production. Owing to the differences of climate, geology, or industrial

Gain of subjective utility.

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Differential costs of production.

history, one country can produce certain things more cheaply than another, or which the other cannot produce at all. Thus a nation whose soil and climate are adapted to growing cotton should, under this theory, devote itself mainly to growing cotton, exchanging it with some nation whose command of other raw materials, such as coal and iron, renders it especially suitable for manufacturing. In this way every nation gets the benefitof the special products or facilities for production of every other nation, and the total world's production is the greatest possible. It is to the advantage of all the world, for example, that Egypt should grow fine cotton, while Lancashire with its humid climate should be devoted to fine spinning. Not only will this pay the world at large best, but it will also be the most profitable course for each of the countries concerned, and if the trade between nations were left entirely free from artificial restrictions, the effect of competition would be to produce this ideal distribution of productive capacity.

An anomaly.

This theory sometimes produces the puzzling anomaly that it may actually pay a country to import something from abroad which it could really produce more cheaply at home. For example, it pays England, the finest dairy country in the world, to import dairy produce from Denmark, paying for it with coal and manufactured goods. The explanation is that the imports are paid for with something else, in the production of which the first country has a still greater advantage; as in the above illustration, Denmark can produce butter, &c., nearly as well as England, but Denmark has no coal at all. England has a greater advantage in the production of coal than she has in dairy produce. It pays her therefore to devote herself to that branch in which she has the *greatest* advantage. In the same way, it might pay an individual to buy from others something which he could make better or more cheaply himself, if by doing so he could devote himself to some other branch of production in which he has special advantages.

The theory of international trade is therefore that each country should produce, not merely what it can produce more

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cheaply at home than it can buy from abroad, but what it can produce to the greatest advantage. This is known as the theory of comparative cost. What must be considered in each case is not the cost of producing the commodity in one country as compared with the cost of importing it from abroad, but rather the comparative cost of producing each commodity in the two countries. Thus if in one country X a commodity A costs five units of labour and capital to produce, and another commodity B costs ten similar units, while in another country Y the production of A costs only three units of labour, &c., against nine for B, then Y should devote itself entirely to producing A and leave B to be produced in X (although Y can actually produce B more cheaply than X can), because the comparative cost of A to B in Y is 1 : 3 against 1 : 2 in X. Thus 100 units of A produced in Y and 100 units of B produced in X will cost altogether 1,300. By any other distribution the cost would be increased.

Theory of comparative cost.

It follows from this that certain commonly accepted views of the advantages of foreign trade require revision. If the man in the street were asked whether the advantage of our foreign trade lies in the imports or the exports, he would probably say the latter. Our imports, except the raw materials of our industries, are, from this point of view, regarded as at best a necessary evil. We must also, of course, import exotics, that is to say, those foreign commodities which owing to climatic and other conditions cannot be produced in this country, such as cotton or tea; and it hardly affects the question whether these things are raw materials for our industries or conventional necessaries for our food supply. But when it comes to foreign articles of luxury, such as champagne, for example, the advantage is regarded as doubtful, and when we reach the final case of foreign wheat, which we obviously could grow ourselves, the import is looked upon as an unquestionable evil. From this point of view, then, the desirable part of our foreign trade is our exports. That we should supply all the world with manufactured articles, the products

Popular ideas.

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of our great industries, seems to be regarded as the chief object of our existence, and the best test of the prosperity of these industries. Yet that all our exports are not regarded as equally desirable is apparent when we come to discuss the export of raw materials, such as coal.

Exports v. imports.

What is the underlying idea of this attitude? Apparently it is that exports should be encouraged because they provide an outlet for the products of our home industries, but that nothing should be exported which might be used at home for these industries. Imports, on the other hand, are harmless only when they provide materials for our industries, and are most objectionable when they consist of commodities such as wheat, which might be grown at home. When imports consist of manufactured articles directly competing with the products of our own home industries, no condemnation, it seems, can be too strong.

All this points to an apparent misconception of the object of our home industries, namely that these industries exist primarily for the purpose of manufacturing goods for export, that the business of this country in the world is to manufacture goods for all the rest of the world, that any other nation which, inspired with a similar idea, tries to cut us out in what are fondly regarded as *our* foreign markets, is in some way meddling with that part of the world's business which belongs by right to us, and that any nation that tries to send manufactured goods into our country has not merely committed the folly of sending coals to Newcastle, but is actually guilty, as it were, of some sort of trespass.

Home and foreign trade.

The root of the fallacy lies in the idea that the main object of our industries is to make goods for export, that we live by foreign trade, and that our foreign trade is more important than our production for home consumption. It is the idea of the manufacturer converted into a national policy. The manufacturer makes his living by making goods which he almost never uses himself, and selling them to somebody else. But that is not the true model for a nation's policy. A nation

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is not a factory turning out goods for sale to other nations. Still less is it a merchant or shopkeeper buying and selling other nations' goods, and making a profit on the turnover. Its position should rather be like that of the old yeoman farmer, whose land produced most things that he required to feed and clothe himself and his dependants, leaving a surplus to exchange for such luxuries as he could not produce himself. The prime object, then, of a nation's industry is to feed, clothe, and house her own population, who are the chief producers of all her manufactures, and are entitled to consume the major part of them. But as the manufactures are partly dependent on the use of foreign raw materials, these also must be paid for by a share of the finished commodities; and if, as in these days, when we lay the whole world under contribution for the satisfaction of our high and complex standard of living, our workers want tea, coffee, cocoa, tobacco, spices, and a thousand other things that we cannot grow ourselves, it is only right that we should pay the producers of these foreign commodities with part of our manufactured goods.

The nation's position.

The nation's exports, therefore, are only its surplus, which it exchanges for those foreign products which it cannot produce itself. Wherein then lies the advantage of this exchange? Clearly, if one must choose between the exports and imports, the advantage lies in the imports. We give of our abundance of cheaply manufactured goods in exchange for other commodities which, because we cannot produce them at all, or so easily as the foreigner, we value more highly than the things we produce ourselves so easily. The gain to us is in getting something which is worth more to us than what we give in exchange for it; in other words, the gain lies in the imports rather than the exports.

Function of imports and exports.

This, of course, must not be taken as in any way detracting from the real advantage and value of our export trade. If, for example, the turnover of the cotton trade is enormously increased by our exports of cotton goods, the effect will be, owing to the well-known economies of large production, that

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the cost per pound of yarn or yard of cloth produced in this country will be so much the less, and our own home consumers will benefit by this reduced cost of production. Here, too, lies some consolation for the much-regretted imports of wheat, &c., which might be grown at home. These imports must be paid for in goods, and the effect is not only that the textile operatives have good wages to spend, and cheap bread for themselves and their families, but also that the farmer himself, who is suffering by the low price of his wheat, finds the price of everything else he buys more or less reduced in consequence.

Relative importance of foreign trade.

It is perhaps not surprising that those whose business makes them familiar with any branch of our foreign trade should be inclined to exaggerate its importance, and this tendency was accentuated by the fact that until a few years ago no figures of the extent of our total home production were available to enable us to form a true estimate of the relative importance of foreign trade and home consumption. As far back as 1877 Sir Robert Giffen estimated the income or profit derived from our export trade as not more than one-eighth of our total income; but it was not till the Census of Production of 1907 that it became possible to form anything but the vaguest statistical ideas on the subject. Now, however, it is known that the total net output of all our home industries, including agriculture and fisheries, in that year was not less than £1,456,000,000, while the total value of our exports of home produce in that year was only £426,000,000, and of our net imports £554,000,000.

National trade policies.

But while this theory of comparative cost is the basis of the economic theory of international trade, it is unfortunately not the principle which actually rules the trade policy of the nations, and the reason is obvious. The theory of international trade is an ideal theory of what things would be like if the world were ruled by one all-wise body which had no other interests in view but those of the world as a whole. But that is not the way the world is ruled, and we never had more

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cause to realize it than to-day. For many reasons, geographical, ethnographical, and historical, the world is divided up into a number of separate nations, whose trade policy is ruled by no consideration of cosmic ideals, but by frankly selfish national aims. Differences of language and race, of climate and natural conditions, and national and racial antipathies due to historical antagonism, have made it useless to hope for any conscious approximation to the ideal principles of international trade. Never has a prophecy been more promptly and completely falsified than was that of the Free Trade leaders in England in 1846, that within five years after the triumph of the Corn Law agitation in England every other civilized country in the world would be following our example. It is well, here, however, to enter a caution against the idea that England adopted the policy of Free Trade because it was the international ideal. The truth is, and our reputation for honesty has suffered seriously in the minds of our continental neighbours because so many of us apparently did not see it, that we adopted that policy because, under the particular circumstances at that time, it was the policy which was likely to suit our own interests best. We failed to realize then, and to a considerable extent since, that because that policy suited our conditions, it did not necessarily suit those of other nations, nor indeed would it necessarily suit ourselves best if conditions should change. But the rise of the German school of national economists very quickly brought out the difference between their position and ours, which was indeed the difference between our position and that of most of the other nations of the world. We know now, however, that fiscal policy is not a matter of international theory or general principle, but a matter of national policy or expediency. The question of Free Trade or Protection, therefore, is no longer a question of principle but of policy. Of the principle there can really be no question. World-wide free trade, which by the force of competition would compel every nation to devote itself to the production of those commodities in which it had the greatest advantage,

England's position.

Policy not principle.

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The ideal. would certainly be the world ideal; but what each nation has to consider is not the principles that would best suit an ideal world, but the actual measures which are likely to prove of greatest advantage to its own peculiar national interests. Most countries, except ourselves, have therefore thought fit to adopt a certain degree of Protection, that is to say, they have thought it advisable to interfere more or less with the natural flow of industry, and have tried to attract or divert it into what were thought to be the most desirable channels.

It would, however, be going to the other extreme to imagine that the theory of international trade has been entirely disregarded, or that the distribution of the world's productive capacity has been on the whole arranged in despite of it. On the contrary, the great bulk of the world's industry is, as a matter of fact, carried on in the countries best suited for it. Lancashire does not grow cotton, nor Egypt spin her own

The actual. crop to any great extent. What has happened has rather been that many nations have endeavoured to modify the conditions existing in their own country at particular stages of its development, so as to overcome temporary obstacles to the development of certain industries, which they regarded as necessary or desirable for the full development of the facilities which they believed their country to possess. It is true that these restrictions, begun as temporary measures, have in most cases been very difficult, and in many cases impossible, to get rid of; but this does not alter the fact that on the whole the world's trade is following the line of least resistance, that is to say, the line of the international theory of comparative cost, and that the cases in which one nation is persistently carrying on an industry at a loss are comparatively few.

One more caution as to a popular misconception regarding international trade relations may be of advantage. People sometimes talk as if international trade meant trade between nations, and, especially in discussions about fiscal questions, phrases are used about the fiscal policy of particular nations, e.g. 'What Germany has done for her foreign trade', as if the

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trade between nations were conducted or mainly controlled by their governments. This is of course quite untrue. International trade is conducted almost entirely by the individual traders of the different nations, and their prime (one might almost say exclusive) motive is to make money for themselves. The government may lay down certain conditions as to trade, it may impose duties or confer bounties upon certain commodities when imported or exported, or provide certain facilities for, or place certain obstacles in the way of certain trades; but only in very few cases does it actually take a hand in these trades itself. The world's traders are private individuals, firms or corporations working for their own profit.

The world's traders.

The reasons which have led various countries to adopt protection for particular industries or for certain classes of industries may be made clearer by a few illustrations. For example, in France great importance is attached to the maintenance of the class of peasant proprietors. The system of equal division of land among the family had led to an increasing subdivision of land into very small holdings, followed necessarily by a system of highly intensive cultivation. But with the development of the great agricultural areas of the New World, with their virgin soil and high yield in proportion to the labour and capital applied, the agriculture of France was threatened with competition which was likely to prove fatal to the interests of the small holders. It was therefore thought necessary to protect these peasant proprietors by setting up a wall of protection round their products. The result is that their existence has been continued, and France has been saved the difficulty of finding some other employment for the great mass of her population which would have been thrown out of employment by the ruin of agriculture; for France, unlike England, has no great industries to which these people could be diverted.

Protection in France.

In Germany we find a different illustration of the same idea. The discovery of chemical dyes had killed the old madder-root industry, which occupied large areas of land not suitable for any

In Germany

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other crops. The government, facing the situation, set themselves to discover some means of utilizing these lands for another crop; and ultimately beet-root was recommended for this purpose, beet being useful for the manufacture of sugar. But, to enable this new industry to compete with the old-established cane-sugar industry of the West Indies, it was necessary to give it some assistance. The actual method by which the system of sugar bounties developed was partly accidental; but the result was to develop an enormous industry in beet-sugar in Germany, which, in the first place at least, saved the country from a very serious difficulty.

In America.

America, again, provides an illustration of another argument for protection. The economic position of the United States is unique. Owing to their enormous extent, they include within their dominions practically every variety of soil and climate, and every kind of product, raw materials, &c. They were therefore pre-eminently fitted to become a nation almost entirely independent of foreign trade, self-sufficing and self-contained. But in the early days their industries required assistance to enable them to compete with the old-established industries of England. It was therefore argued that America ought to protect her infant industries, as they are called, from the competition of these older rivals, and the system of protection was commenced, which has since grown to such enormous proportions.

Great Britain.

Great Britain, on the other hand, may be taken as an illustration of the contrary case, where the circumstances of the country pointed clearly to the advantages of free trade. Her rapidly developing industries and her enormous industrial population required, above everything, cheap raw materials and cheap food; while, on the other hand, she required a free market for her surplus manufactures. Protection in such circumstances would have been folly. Free trade was the means of building up the industrial supremacy of Great Britain.

It is next to be noted that the mere fact of the existence of import duties does not necessarily mean protection, because

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such duties may not be protective at all, but merely for revenue purposes. To make this clear, the distinction between revenue and protective duties must be kept in view. Duties charged upon goods may be of two kinds—(1) Customs duties charged on the import of goods into this country, and (2) Excise duties levied upon goods made in the country. When the same rate of duty is charged upon goods imported into the country and also upon similar goods made or grown in the country, it is merely a revenue duty. But if customs dues are levied on goods imported, while no excise duty is charged on similar goods produced in the country, the result is clearly to protect the home industry. A protective duty may thus be described as *a customs duty not balanced by a corresponding excise duty*. The import duties in England before the war were therefore not protective, because all the goods upon which the customs duties were charged were not grown or manufactured in the country at all. Import duties were only charged upon 'exotics'—that is to say, upon goods which cannot be produced in the country, such as tea, tobacco, &c. The only other heavy import duty in England, that on spirits and wines, was balanced by an excise duty on all spirits made in the country, so that it had no protective effect.

Customs v. Revenue duties.

The main arguments in favour of Protection may now be briefly stated, noting at the same time certain objections to them.

Arguments for and against Protection.

(1) It is argued, as in the case of America already quoted, that where a new country is trying to develop industries for which it possesses natural facilities—for example raw materials—they require the assistance of a little protection against foreign competition to enable them to survive the first difficulties which must be faced in a new country, such as the dearth of capital, the high wages of labour, and the general inefficiency of production as compared with the well-established industries of an old country, with all the benefits of long experience. There is some force in this argument, but the objection to the adoption of such a policy is that these industries never seem to get past

Infant industries.

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the stage of infancy. As they grow up, fostered by the artificial stimulus of protection, they become so accustomed to its assistance that they can never reconcile themselves to doing without it. It is an unfortunate fact with regard to protection generally, that it always seems to lead to the growth of vested interests, which become so powerful that they are able to defend themselves against the attacks of those who think that it is time the protection was abolished. This has certainly been the experience of the United States, where the protected industries have become so strong that they control the legislature, and, instead of doing away with protection, they get the tariffs raised higher and higher. The result is that the consumer must pay high prices for many commodities, out of which the producers are making large profits.

Essential industries.

(2) It is often argued that a country should protect certain industries which are essential to the continued prosperity of the country, and which are likely to be attacked by foreign competition, such as the agricultural industry of France, upon which the peasant proprietors depend. But the result is expensive to the consumers, for it means that they must pay high prices for home-grown produce which they could buy more cheaply from abroad. It may be worth it, but the fact cannot be concealed that it involves a sacrifice on the part of the consumers at large for the benefit of a certain class of producers, and in every case its justification depends on the relative importance of the particular class of producers as compared with the general public, who are the consumers.

List's argument.

(3) Similar to this is what is known as List's argument, that the wealth of a country must be measured not merely by the money value of its production and trade, but by the variety of the commodities which it produces. It is argued that a country whose productive capacity has become centred in one or two great industries, such as the export of raw materials, is exposed to great dangers in the event of these industries being injured by outside competition, or by the failure of the supply of raw materials upon which they depend. It must be remembered,

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however, that if many people are going into one trade, it can only be because that trade pays better than others, and it would require very special circumstances to justify any government in trying to keep people out of a profitable trade, such as cotton-growing in Egypt. What the government can do, however, is to assist the development of other trades, and the transfer of labour and capital to these others, whenever the signs of decay manifest themselves in the staple industry.

War necessities.

(4) Again, it may be argued that there are certain industries so essential to the existence of a country in time of war, that it is necessary to protect them in times of peace. The effect of foreign competition on British agriculture, for example, has been so serious, that now it would be practically impossible to maintain the population of the country on its own production of food-stuffs. Thus the country is dependent on foreign supplies of wheat, &c., and if these could be cut off by an enemy in time of war, the country might be reduced to subjection by practical starvation. But the cheapest and in the long run the only effective remedy is, to make sure of the safety of the overseas supplies, by maintaining a sufficient navy to protect the merchant service. Not only the food supplies, but also the raw materials upon which most of the industries of the country depend, come into the country from abroad.

Armaments.

(5) A similar argument applies to those industries directly connected with the supply of war materials, such as dockyards and arsenals.

Pauper labour.

(6) The 'pauper labour' argument is that, under protection wages are generally higher than in unprotected countries, and that to allow free imports of goods from countries where they are made by lower paid labour would mean the reduction of the wages paid under protection, and, consequently, of the standard of living and efficiency of the workers. This argument, however, is partly discounted by the fact that in protected countries the prices of the commodities on which the workman spends his wages are proportionately almost as high as his wages, so that the real purchasing power of his wages is not much higher.

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Support home industries.

(7) The general argument that the home producer is in some way entitled to a preference over the foreigner is, from the economic point of view, entirely unsound. If one industry is so inefficient, that it requires to be permanently maintained at the expense of others—that is to say, at the expense of the consumers in general—then it is economically wrong to continue it at all. If it cannot subsist without such artificial aid, let it go to the wall; only very special circumstances can justify an industry being maintained by what practically amounts to charity.

Balance of trade.

An important objection to protection is founded on the law of the balance of trade. If a country ceases to import goods, it must at the same time cease exporting some other kind of goods, which were being sent abroad in payment of the imports. Suppose that protective measures are adopted to exclude certain foreign imports which are competing in an undesirable way with home trade in one department, the primary result, if the protection is effective at all, will be to reduce the imports of that commodity; but the inevitable result of that will be to cause a falling off somewhere else in the goods exported by some other industry. In other words, the gain of one industry is the loss of another, and no one can foretell where this result will make itself seen; it may be in the most unexpected quarter. The result is that when a country once embarks on a career of protection, it generally finds it necessary to carry it much further than it intended. The protection of one industry does injury to another, which also demands protection, and so on in an apparently endless succession.

But the most serious objection to protection is that it is deceptive in its effects. It is generally argued that protection costs the protected country nothing, because the duties must be paid by the foreigner when sending his goods into the country. This is a question of great difficulty, and, indeed it is hardly ever possible to prove conclusively by experience the real incidence of such a tax. But in any event the protectionists find themselves in a difficulty, because their primary object

Who pays?

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is to protect the home producer, and that can only be secured if the result of the protection is to keep out the foreign goods and allow the home producer to raise his price. Now, if the foreign competitor is kept out in this way, it shows that he declines to pay the duty. If, on the other hand, he continues to send his goods into the country in spite of the tariff, it means either (1) that he has paid the duty out of his own pocket, in which case the price of the commodity in the protected country will be as before, and the home industry will derive no benefit from the protection; or else (2) that the foreigner refuses to pay the duty, but adds it to the price instead, which means that the consumers pay the duty. Thus the protectionists find themselves in this dilemma: If the home producer is to benefit, it can only be by the consumers paying a higher price, which includes the duty, that is to say by their paying the duty. If the foreigner is to pay the duty, then the home producer derives no benefit from the protection. In other words, the home producer can only benefit at the expense of the home consumer. It may fairly be answered that, although the home producers do not benefit directly where the foreigner pays the duty, the country benefits by the revenue received. But this only emphasizes the distinction between revenue and protective duties. It does not seem possible to serve both purposes by one tax.

The dilemma of protection.

In conclusion, it is to be noted that if protection is really thought necessary for some industry, it is better done in most cases by the method of bounties, that is to say by the government paying a direct bonus or bounty to the producer, to assist him in establishing or maintaining his trade. Such a bounty is more effectual and certain in its results, and it can be more accurately adjusted to meet the requirements of the trade in question. Again, instead of having a harmful effect on imports, and thence on exports, it benefits both by encouraging exports and therefore imports as well. Lastly, bounties are perfectly open and straightforward; they bear their true character on the face of them—a sacrifice deliberately incurred for a special

Bounties.

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object. But that is the very reason why they are not likely to be widely adopted, because when the consumers see that they are being asked to make a sacrifice for the benefit of someone else, they generally decline to do it. It is the idea that protective duties can somehow be taken out of the pocket of the foreigner that makes many people so anxious to try them. When the public realize, as they very easily do in the case of bounties, that the benefit to someone else is to come out of their own pockets, they refuse to sanction it.

GIDE, chap. vii, §§ 3 and 4, and chap. viii.
SMART, *The Return to Protection.*
BASTABLE, *Theory of International Trade.*
,, *The Commerce of Nations.*
FUCHS, *The Trade Policy of Great Britain.*

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STATISTICAL APPENDIX

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TABLE I.—THE WORLD'S PRODUCTION OF GOLD AND SILVER SINCE THE DISCOVERY OF AMERICA, AND THE PROBABLE STOCK OF GOLD.

(In millions of £'s)

Average of the Years.	Gold.		Silver.		Gold and Silver. Total.[2]	Gold per cent. of Total.
	Annual.	Total.	Annual.	Total.		
			Soetbeer.			
1493–1520	0·8	22·7[1]	0·6	17·1	39·8	57
1521–1544	1·0	24·0	1·1	27·0	51·0	47
1545–1560	1·2	18·9	3·8	61·6	80·5	24
1561–1580	1·0	19·1	3·6	72·8	91·9	21
1581–1600	1·0	20·6	4·9	98·8	119·4	17
1601–1620	1·2	23·8	4·8	96·4	120·2	20
1621–1640	1·2	23·2	3·9	78·3	101·5	23
1641–1660	1·2	24·5	3·5	70·3	94·8	26
1661–1680	1·3	25·8	3·1	62·8	88·6	29
1681–1700	1·5	30·0	3·3	63·6	93·6	32
1701–1720	1·8	35·8	3·3	65·0	100·8	36
1721–1740	2·7	53·2	4·0	79·8	133·0	40
1741–1760	3·4	68·7	5·0	100·7	169·4	41
1761–1780	2·9	57·8	6·2	124·0	181·8	32
1781–1800	2·5	49·6	8·1	162·7	212·3	23
1801–1810	2·5	24·8	8·0	80·0	104·8	24
1811–1820	1·6	16·0	4·9	48·6	64·6	25
1821–1830	2·0	19·8	4·1	41·3	61·1	32
1831–1840	2·8	28·3	5·3	52·8	81·1	35
1841–1850	7·6	76·4	6·9	68·7	145·1	53
1851–1855	27·8	139·1	8·0	40·1	179·2	75
1856–1860	28·1	140·7	8·2	41·2	181·9	75
1861–1865	25·8	129·1	10·0	49·8	178·9	72
1866–1870	27·2	136·0	12·0	59·9	195·9	70
1871–1875	24·3	121·3	17·2	86·2	207·5	58
Forward .		1,329·2		1,749·5	3,078·7	43

[1] It is quite impossible to estimate the stock in existence before 1493.

[2] In calculating the Aggregate Stock at any period (as in Diagram C) one-third is deducted for loss and industrial consumption.

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TABLE I (*continued*)

Year.	Gold. Annual.	Gold. Total.	Silver. Annual.	Year.	Gold. Annual.	Gold. Total.	Silver Annual.
	Forward.	1,329·2			Forward.	1,836·4	Million oz.
1876	23·1[1]		18·2[2]	1896	41·9[1]		157
7	25·0		19·3	7	48·9		164
8	26·0		19·8	8	59·3		173
9	23·4		19·1	9	63·2		167
1880	22·8		19·1	1900	52·8		173
		120·3				266·1	
1	22·4		19·8	1	54·3		173
2	21·4		21·2	2	59·3		163
3	20·7		21·7	3	65·9[4]		168
4	21·7		22·2	4	69·8		164
5	21·7		21·9[3]	5	75·7		170
		107·9				325·0	
6	22·4		20·3	6	81·1		166
7	22·0		22·0	7	82·3		185
8	23·0		23·9	8	88·7		203
9	24·6		26·8	9	92·0		211
1890	24·7		26·6	1910	90·9		223
		116·7	Million oz.			435·0	
1	25·4		138[5]	1	91·9		225
2	27·5		153	2	94·9		224
3	31·2		166	3	92·7		224
4	37·7		168	4	92·9		211
5	40·5		169	5	98·0		196
		162·3				470·4	
	Forward.	1,836·4		1916	(estimate)	99·0	
						3,431·9	
Deduct one-third for loss and industrial consumption						1,143·9	
Leaves probable world's stock at end of 1916 .						£2,288	millions

[1] *Layton*, Introduction to the Study of Prices, Appendix B.
[2] *Soetbeer*, Materials for the Illustration and Criticism of the Currency Question (Gold and Silver Commission, 1888. Appendix).
[3] *Shaw*, History of Currency, p. 155.
[4] *Economist.* [5] *Financial Review.*

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TABLE II.—WORLD'S COINAGE OF GOLD AND SILVER, 1876–1916

From the *Dictionary of Political Economy* Supplement and the Mint Reports

(In millions of £'s)

Year.	*Gold.*	*Silver.*	*Year.*	*Gold.*	*Silver.*
1876	42·6	25·3	1897	87·5	33·6
7	40·3	22·9	8	79·1	29·9
8	37·7	32·2	9	93·2	33·2
9	18·2	21·0	1900	71·0	37·1
1880	29·9	16·9	1	49·6	27·8
1	29·4	21·6	2	44·1	38·7
2	19·9	22·2	3	48·1	42·4
3	21·0	21·9	4	91·1	35·3
4	19·9	19·2	5	49·2	34·5
5	19·2	25·4	6	68·7	27·6
6	18·9	25·0	7	76·1	42·9
7	25·0	32·7	8	80·8	36·5
8	27·0	27·0	9	67·5	24·0
9	33·8	27·9	1910	84·8	18·2
1890	29·8	30·5	1	76·7	16·6
1	23·9	27·7	2	74·0	29·1
2	34·5	31·1	3	65·5	32·6
3	46·5	27·6	4	44·8	34·4
4	45·6	22·6	5	41·4	36·5
5	46·2	25·4	6		
6	39·2	31·9			

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TABLE III.—IMPERIAL GOLD, SILVER, AND BRONZE MONEYS ISSUED FROM THE ROYAL MINT, LONDON, AND LIGHT OR WORN COIN WITHDRAWN FROM CIRCULATION, 1900–1916

Statistical Abstract U. K. (Cd. 7636), 1913, and Mint Reports

(In £'s—000's omitted)

Year.	*Gold.*		*Silver.*		*Bronze.*	
	Issued.	*With-drawn.*	*Issued.*	*With-drawn.*	*Issued.*	*With-drawn.*
1900	13,594	1,800	2,013	347	168	—
1	2,599	1,800	914	243	120	—
2	6,644	2,100	937	410	148	—
3	10,144	1,800	558	277	114	—
4	11,042	2,100	606	639	78	—
5	6,500	2,700	510	452	100	—
6	12,165	2,700	1,705	666	185	—
7	20,951	2,700	2,020	721	228	—
8	14,600	3,300	816	277	156	5
9	13,800	3,000	1,390	735	122	21
1910	25,300	2,700	2,521	565	151	22
1	33,133	2,350	2,381	581	140	20
2	33,350	3,150	2,456	544	323	16
3	27,639	2,900	1,934	608	315	14
4	15,126	1,475	6,250	607	261	10
5	21,301	1,200	7,599	200	248	5
6						

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TABLE IV.—AVERAGE PRICE OF SILVER, AND SEIGNIORAGE ON THE SILVER COINAGE OF THE UNITED KINGDOM, 1870–1916

(Annual Reports on the Mint)

Year.	*Average price of Silver in London. Pence per oz.*	*Rate of Seigniorage per cent.*	*Profit on Silver Coinage (£'s-000's).*
1870	60 1/2	9·09	9
1	60 9/16	9·20	55
2	60 1/4	9·43	77
3	59 1/4	12·22	143
4	58 5/16	12·34	54
5	56 13/16	16·04	62
6	53	none bought	none bought
7	54 3/4	17·72	54
8	52 9/16	31·83	32
9	51 13/16	24·82	26
1880	52 1/4	26·62	56
1	51 3/4	27·38	167
2	51 11/16	28·15	17
3	50 9/16	30·05	225
4	50 11/16	30·69	92
5	48 3/4	35·91	125
6	45 3/4	41·74	66
7	44 3/4	47·90	230
8	42 7/8	53·71	178
9	42 11/16	54·16	802
1890	47 1/2	35·56	323
1	45 1/16	45·65	239
2	39 1/16	65·78	289
3	35 5/8	81·75	274
4	29	125·64	344
5	29 7/8	117·28	405
6	30 1/4	117·73	566
7	27 9/16	136·77	402
8	26 1/16	142·20	563
9	27 7/16	140·00	782
1900	28 1/4	133·63	977
1	27 3/16	136·24	538
2	24 1/8	171·46	368
3	24 3/8	178·95	90
4	26 1/8	149·06	80
5	27 1/16	140·55	37
6	30 7/16	112·47	513
7	30 3/16	115·90	800
8	24 1/8	169·83	595
9	23 11/16	178·83	176
1910	24 1/16	165·49	1,583
1	24 1/16	165·76	523
2	28 1/16	136·22	1,143
3	27 1/16	135·29	763
4	25 5/16	171·27	3,502
5	23 11/16	172·08	4,694
6	31 5/16		

Lowest price on record, 21 11/16*d.*, on Nov. 27, 1902.

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TABLE V.—INDEX NUMBERS, 1782–1916

The following continuous Index Number from 1782 to 1916 is founded upon three sources: (1) Jevons's Index Number from 1782 to 1860; (2) Sauerbeck's from 1860 to 1870; and (3) the Board of Trade Index Number from 1871 to date. The first two have been recalculated to fit into the third, which is based on the year 1900 as 100.

See Layton's Appendix A and references there given.

Year.	*No.*	*Year.*	*No.*	*Year.*	*No.*	*Year.*	*No.*
1782	168	1816	152	1850	107	1884	114·1
3	168	7	195	1	110	5	107·0
4	156	8	220	2	108	6	101·0
5	151	9	187	3	123	7	98·8
6	143	1820	172	4	138	8	101·8
7	146	1	157	5	133	9	103·4
8	146	2	147	6	137	1890	103·3
9	143	3	148	7	142	1	106·9
1790	146	4	147	8	127	2	101·1
1	149	5	172	9	128	3	99·4
2	156	6	150	1860	**132**	4	93·5
3	166	7	150	1	131	5	90·7
4	165	8	135	2	135	6	88·2
5	196	9	132	3	137	7	90·1
6	220	1830	135	4	140	8	93·2
7	185	1	137	5	135	9	92·2
8	198	2	130	6	136	1900	**100·0**
9	218	3	125	7	133	1	96·7
1800	235	4	130	8	132	2	96·4
1	233	5	133	9	131	3	96·9
2	183	6	143	1870	**128**	4	98·2
3	208	7	140	1	135·6	5	97·6
4	198	8	140	2	145·2	6	100·8
5	220	9	153	3	151·9	7	106·0
6	217	1840	145	4	146·9	8	103·0
7	215	1	142	5	140·4	9	104·1
8	242	2	125	6	137·1	1910	108·8
9	262	3	118	7	140·4	1	109·4
1810	237	4	115	8	131·1	2	114·9
1	227	5	123	9	125·0	3	116·5
2	202	6	123	1880	129·0	4	117·2
3	192	7	130	1	126·6	5	143·9
4	190	8	113	2	127·7	6	186·5
5	182	9	107	3	125·9		

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TABLE VI.—MONTHLY INDEX NUMBER OF WHOLESALE PRICES, 1913–1917

(From the *Economist*)

Date.	Cereals & Meat.	Other Foods.	Textiles.	Minerals.	Miscellaneous.	Total.	Per cent.	
							On basis.	On July, 1914
Basis, 1901–1905	500	300	500	400	500	2,200	100·0	
End of January, 1913	606	363	623	534½	605½	2,732	124·1	—
February	602½	364½	630½	519	600½	2,717	123·4	—
March	594	358	641	529	595	2,717	123·4	—
April	603	352	638½	542	593½	2,729	124·0	—
May	583	343	630	542	596	2,694	122·4	—
June	580	345½	623½	522½	597½	2,669	121·3	—
July	584	345½	620	530	609½	2,689	122·2	—
August	581½	352½	638½	529	585	2,687	122·1	—
September	583	359	671	523	578	2,714	123·3	—
October	567	365	667	514	571	2,684	122·1	—
November	569½	361	654	495	575½	2,655	120·7	—
December	563	355	642	491	572	2,623	119·2	—
January, 1914	562½	356	626	502	571½	2,618	119·0	—
February	573½	352	630	491½	569	2,616	118·9	—
March	560	350½	626½	493	567	2,597	118·0	—
April	560½	346	633½	482½	562½	2,585	117·5	—
May	570½	349	644½	480	551	2,595	118·0	—
June	565½	345	616	471½	551	2,549	115·9	—
July	579	352	616½	464½	553	2,565	116·6	—
August	641	369	626	474	588	2,698	122·6	105
September	646	405	611½	472½	645	2,780	126·4	108
October	656½	400½	560	458	657	2,732	124·2	107
November	683	407½	512	473	684½	2,760	125·5	108
December	714	414½	509	476	686½	2,800	127·3	109

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TABLE VI (*continued*)

Date.	Cereals & Meat.	Other Foods.	Textiles.	Minerals.	Miscellaneous.	Total.	Per cent.	
							On basis.	On July, 1914.
End of January, 1915	786	413	535	521	748	3,003	136·5	117
February	845	411	552½	561½	761	3,131	142·3	122
March	840	427	597	644	797	3,305	150·2	129
April	847	439½	594½	630	816	3,327	151·2	130
May	893	437	583	600	814	3,327	151·2	130
June	818	428	601	624	779	3,250	147·7	127
July	838½	440½	603	625	774	3,281	149·1	128
August	841	438½	628	610½	778	3,296	149·8	128
September	809½	470½	667	619½	769½	3,336	151·6	129
October	834	443½	681	631½	781	3,371	153·2	131
November	871½	444	691	667½	826	3,500	159·1	137
December	897	446	731	711½	848½	3,634	165·1	142
January, 1916	946½	465	782½	761½	884½	3,840	174·5	150
February	983	520½	805½	801½	897½	4,008	182·2	157
March	949½	503	796½	851	913	4,013	182·4	157
April	970½	511	794½	895	1,019	4,190	190·5	163
May	1,024	529	805	942	1,019	4,319	196·3	168
June	989	520	794	895	1,015	4,213	191·5	164
July	961	525	797	881	1,040	4,204	191·1	164
August	999½	531½	882	873	1,086	4,372	198·7	171
September	1,018	536½	937	858½	1,073	4,423	201·0	173
October	1,124½	543	990½	850½	1,087½	4,596	208·7	180
November	1,177½	558	1,091	850½	1,102	4,779	217·2	186
December	1,294	553	1,124½	824½	1,112	4,908	223·0	192
January, 1917	1,310	561	1,137	825½	1,119½	4,953	225·1	193
February	1,312½	581½	1,189	829½	1,159½	5,072	230·5	198

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TABLE VII.—MONTHLY RETURN OF THE CURRENCY NOTE ISSUE

(Published officially every Thursday)

(In £'s—000's omitted)

Date.	Notes Outstanding.	Investment Reserve Account.	Advances to		Redemption Account.			
			Banks.	Savings Banks.	Coin and Bullion.	Per cent. to Notes.	Government Securities.	Bank of England.
1914								
August 26	21,535	—	6,302	3,810	—	—	—	11,423
September 2	25,156	—	3,763	4,550	—	—	10,924	5,920
October 7	29,273	—	331·5	2,750	5,000	17·1	11,924	9,268
November 4	32,934	—	334	1,600	10,500	31·9	13,924	6,577
December 2	34,501	—	219	600	14,500	42·0	13,924	5,259
1915								
January 6	37,971	—	164	200	19,500	51·4	14,924	3,184
February 3	35,830	—	149	—	23,500	65·6	10,924	1,257
March 3	37,063	—	159	—	27,500	74·1	5,000	4,404
April 7	40,787	—	159	—	27,500	67·4	8,623	4,505
May 5	42,999	—	139	—	27,500	64·0	8,623	6,736
June 2	45,690	302	139	—	28,500	63·4	9,586	7,768
July 7	48,059	303	139	—	28,500	59·3	9,586	10,138
August 4	46,730	307	1,204	310	28,500	61·0	9,586	7,437
September 1	57,747	308	1,214	471	28,500	49·3	14,586	13,285
October 6	75,237	446	204	289·5	28,500	37·7	20,400	26,289
November 3	84,856	447	189	257	28,500	33·6	44,621	11,736
December 1	91,914	658	179	249	28,500	31·0	54,621	9,023

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TABLE VII (*continued*)

(In £'s—000's omitted)

Date.	Notes Outstanding.	Investment Reserve Account	Advances to		Redemption Account.			
			Banks.	Savings Banks.	Coin and Bullion.	Per cent. to Notes.	Government Securities.	Bank of England.
1916								
January 5	103,040	741	144	249	28,500	27·7	64,621	10,467
February 2	98,839	771	144	33	28,500	28·9	64,357	6,376
March 1	100,893	985	144	33	28,500	28·2	65,203	7,997
April 5	109,437	1,030	144	46	28,500	26·0	75,718	6,059
May 3	177,160	1,045	134	36	28,500	24·4	83,677	5,848
June 7	119,887	1,578	114	46	28,500	23·8	85,680	7,125
July 5	123,817	1,949	104	36	28,500	23·1	91,731	5,395
August 2	127,674	2,254	104	36	28,500	22·4	92,705	8,584
September 6	130,436	2,390	104	36	28,500	21·8	97,972	6,214
October 4	132,991	2,733	94	36	28,500	21·5	101,266	5,827
November 1	137,188	2,733	79	36	28,500	20·8	105,807	5,499
December 6	138,568	3,332	64	40	28,500	20·6	107,268	6,028
1917								
January 3	148,770	3,929	64	40	28,500	19·2	118,097	5,998
February 7	145,652	4,526	64	60	28,500	19·6	114,831	6,723
March 1	144,351	4,741	1,619	260	28,500	19·6	112,573	6,140

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TABLE VIII.—STATISTICS OF THE BANKERS' CLEARING HOUSE, LONDON, 1868–1916

(From the Secretary's Annual Statement)

(In millions of £'s.)

Year.	*Total.*	*Per cent. on 1868.*	*Daily Average.*
1868	3,425	—	11·0
1878	4,992	146	16·3
1888	6,942	203	22·6
1898	8,097	237	26·3
1899	9,150	268	29·9
1900	8,960	262	29·2
1	9,561	279	31·2
2	10,029	293	33·1
3	10,120	295	33·0
4	10,564	308	34·2
5	12,288	358	40·2
6	12,711	371	41·4
7	12,730	371	41·5
8	12,120	354	39·4
9	13,525	394	44·1
1910	14,659	427	47·9
1	14,614	426	48·1
2	15,962	466	51·8
3	16,436	479	53·5
4	14,665	428	48·2
5	13,408	391	43·7
6	15,275	445	50·1

Abstract of Records to Date

	£
Record day, Wednesday, October 30, 1912	131,042,000
Record week, week ended July 1, 1914	445,419,000
Record month, July, 1914	1,546,032,000
Record year, 1913	16,436,404,000

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TABLE IX.—BANKING STATISTICS OF THE UNITED KINGDOM, 1895–1916

(From the *Economist* Banking Numbers)

1. DEPOSITS [1]

	1895	1900	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916
Bank of England	66	44	52	50	49	62	61	56	61	67	71	155	162	179
Joint Stock Banks:														
England and Wales	456	587	628	648	649	675	685	721	749	774	809	896	993	
Scotland	95	107	101	105	109	106	107	107	112	119	126	133	141	
Ireland	44	49	54	55	57	59	60	63	65	67	71	75	78	
Private Banks	70	40	28	27	27	24	26	27	27	27	27	33	33	
Totals	731	827	863	885	891	926	939	974	1,014	1,054	1,104	1,292	1,407	

[1] For earlier figures of Deposits, see Layton, Appendix D.

2. BANK NOTES IN CIRCULATION

Bank of England	26	30	29	29	30	30	29	29	29	29	30	36	35	40
Joint Stock Banks: [2]														
Scotland	7	8	8	8	7	7	7	7	7	8	8	10	13	
Ireland	6	7	6	6	7	6	7	7	7	7	8	11	15	
	39	45	43	43	44	43	43	43	43	44	46	57	63	

[2] The note issues of the English Joint Stock Banks and of the Private Banks are negligible.

3. BANK RATE

Highest	2	6	4	6	7	7	5	5	4½	5	5	10	5	6
Lowest	2	3	2½	3½	4	2½	2½	3	3	3	4½	3	5	5
Average £	2 0 0	3 19 3	3 0 2	4 5 4	4 18 6	3 0 3	3 2 0	3 14 5	3 9 4	3 15 5	4 15 5	4 0 9	5 0 0	5 9 3

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TABLE IX.—BANKING STATISTICS (*continued*)

4. PRINCIPAL ASSETS

	1895	1900	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916
BANK OF ENGLAND:														
Coin and Bullion .	45	29	29	29	31	31	33	31	32	31	35	69	51	54
Investments . .	32	34	31	34	33	33	33	34	34	33	32	33	51	76
Other Securities in Banking Department .	34	29	40	34	33	45	42	37	42	50	52	106	112	106
JOINT STOCK BANKS														
England and Wales:														
Cash, Call Money, &c. .	111	144	180	179	174	194	200	200	211	216	236	276	262	
Investments . .	107	128	132	131	126	137	137	138	134	128	121	146	311	
Discounts, &c. . .	312	395	401	426	431	428	434	468	485	516	540	553	504	
Scotland:														
Cash, Call Money, &c. .	23	26	24	26	27	26	26	26	30	34	34	35	37	
Investments . .	31	33	31	31	32	33	34	33	34	37	38	45	67	
Discounts, &c. . .	62	70	69	71	73	69	69	71	72	72	78	78	65	
Ireland:														
Cash, Call Money, &c. .	11	12	10	11	12	12	13	14	15	14	17	22	23	
Investments . .	18	18	19	19	20	21	23	23	24	24	24	26	35	
Discounts, &c. . .	31	37	42	42	44	44	42	44	45	47	49	48	45	
Private Banks:														
Cash, Call Money, &c. .	20	11	7	7	7	6	7	6	7	7	6	7	8	
Investments . .	25	15	10	9	9	7	8	8	8	7	8	8	9	
Discounts, &c. . .	36	21	15	15	15	13	14	16	16	16	17	21	19	
	908	1,002	1,040	1,064	1,067	1,099	1,115	1,149	1,189	1,232	1,287	1,473	1,599	

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TABLE X.—WEEKLY RETURN OF THE BANK OF ENGLAND

Accounts pursuant to the Act 7th and 8th Victoria cap. 32 for week ended Wednesday, 6th December, 1916.

ISSUE DEPARTMENT

	£		£
Notes issued	72,683,105	Government debt	11,015,100
		Other securities	7,434,900
		Gold coin and bullion	54,233,105
	72,683,105		72,683,105

BANKING DEPARTMENT

	£		£
Proprietor's capital	14,553,000	Government securities	42,187,693
Rest	3,235,919	Other securities	106,749,646
Public deposits[1]	58,716,597	Notes	34,824,770
Other deposits	108,946,191	Gold and silver coin	1,709,625
Seven-day and other bills	20,027		
	185,471,734		185,471,734

[1] Including Exchequer, Savings Banks, Commissioners of National Debt, and Dividend Accounts.

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TABLE XI.—ANALYSIS OF THE BANK OF ENGLAND'S WEEKLY RETURN, 1914–1917

Date.	Coin and Bullion.	Note circulation.	Deposits.	Securities in Banking Department.	Reserve.	Per cent. of Liabilities.	Bank Rate.
1914							
Jan. 7	37·1	29·0	53·7	45·2	26·5	49⅜	4½
Feb. 4	43·4	28·4	62·5	47·2	33·4	53⅜	3
March 4	41·8	28·5	63·3	49·8	31·7	50⅛	3
April 1	39·0	29·5	67·5	57·8	28·0	41⅜	3
May 6	35·9	28·8	57·8	49·9	25·6	44¼	3
June 3	36·0	29·0	59·9	52·2	25·4	42½	3
July 1	40·1	29·8	71·6	60·7	28·7	40⅛	3
Aug. 8	27·6	36·1	68·2	76·4	10·0	14¼	6
Sept. 2	47·8	35·3	162·5	149·8	30·9	19	5
Oct. 7	56·8	34·8	164·5	141·9	40·4	24½	5
Nov. 4	69·5	35·5	156·7	122·1	52·4	33⅜	5
Dec. 2	71·4	35·9	180·5	144·4	53·9	29⅞	5
1915							
Jan. 6	68·8	35·9	157·2	123·7	51·4	32¾	5
Feb. 3	67·6	34·8	162·5	129·4	51·3	31½	5
March 3	60·0	34·5	170·7	145·1	43·9	25⅝	5
April 7	53·8	34·9	202·9	183·4	37·3	18⅜	5
May 5	56·3	34·9	219·3	197·2	39·8	18⅛	5
June 2	58·6	33·5	215·8	189·9	43·6	20¼	5
July 7	53·3	35·1	207·8	189·0	36·6	17⅝	5
Aug. 4	62·2	33·5	231·3	202·1	47·2	20⅜	5
Sept. 1	68·4	32·3	225·9	189·5	54·6	24⅛	5
Oct. 6	61·2	32·9	179·7	150·6	46·8	26	5
Nov. 3	56·7	33·4	141·3	117·4	41·7	29½	5
Dec. 1	51·2	34·3	143·9	126·3	35·4	24½	5
1916							
Jan. 5	51·1	35·2	164·0	147·6	34·4	21	5
Feb. 2	52·7	34·2	156·8	138·0	36·9	23½	5
March 1	56·1	33·3	152·6	129·6	41·3	27	5
April 5	56·5	33·9	157·7	134·3	41·0	26	5
May 3	57·5	34·3	134·5	110·6	41·6	31	5
June 7	61·6	35·5	132·6	105·8	44·5	32½	5
July 5	60·3	36·4	162·6	138·0	42·4	26	5
Aug. 2	54·9	36·7	136·5	117·8	36·7	26⅞	6
Sept. 6	55·3	36·3	157·3	137·9	37·5	23⅞	6
Oct. 4	54·6	37·1	169·6	151·4	36·0	21¼	6
Nov. 1	56·4	37·2	167·7	147·9	37·6	22⅜	6
Dec. 6	55·9	37·9	167·7	148·9	36·5	21⅝	6
1917							
Jan. 3	55·0	39·9	169·5	154·0	33·5	19¾	6
Feb. 7	56·9	39·5	268·7	251·0	35·8	13⅜	5½
March 7	54·0	38·2	244·1	228·0	34·2	14	5½

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TABLE XII.—LONDON COURSE OF EXCHANGE

(From *The Times* of July 17, 1914, and December 8, 1916)

On.	*Usance.*	*Price negotiated on change. Thursday, July 16, 1914.*	*Meaning.*	*Par of Exchange.*	*Comparative Rates on Thursday, December 7, 1916.*
Amsterdam, &c.	cheques	12·2⅜–12·2⅝	Florins and stivers to £1	12·107	[1] 11·65–67
,,	3 months	12·4⅛–12·5⅛	,, ,, ,,	,,	[2] 11·80–85
Antwerp and Brussels	,,	25·50–25·55	Francs and centimes to £1	25·22½	
Hamburg, Berlin, &c.	,,	20·63–20·67	Marks and pfennigs ,,	20·40	
Paris	cheques	25·17½–25·20	Francs and centimes ,,	25·22½	[1] 27·79–82
Paris and Marseilles	3 months	25·30¼–25·41¼	,, ,, ,,	,,	28·15–20
Switzerland	,,	25·37½–25·42½	,, ,, ,,	25·22½	[1] 24·15–25 24·50–60
Austria	,,	24·41–24·45	Kronen and heller ,,	24·02	
St. Petersburg (now Petrograd) and Moscow	,,	24½–24¾	Pence to 1 rouble	25·6	[1] 163–165 [3] 165¼–74
Genoa	,,	25·56¼–25·61¼	Lire and centesimi to £1	25·22½	[1] 32·15–25 32·63–73
New York	60 days	48 11/16–48 13/16	Pence to $1	49·32	
Madrid	3 months	45 1/16–45 3/16	,, 5 pesetas	47·6	[4] 22·12–22 50–50½
Lisbon and Oporto	,,	45 9/16–45 11/16	,, 1 milreis	53¼	[1] 31–32
Copenhagen	,,	18·48–18·52	Kroner and öre to £1	18·159	[1] 17·50–60
Christiania	,,	18·48–18·52	,, ,, ,,	18·159	[1] 16·87–97
Stockholm	,,	18·48–18·52	,, ,, ,,	18·159	[1] 16·30–40

[1] Cable rates. [2] The Dutch rates are now quoted in florins and *cents*. A stiver is 5 cents.
[3] The Russian long rate is now quoted in roubles and kopeks to £10. [4] The Spanish cable rate is pesetas to £1.

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TABLE XIII.—FOREIGN EXCHANGES ON LONDON

(From *The Times* of July 17, 1914, and December 8, 1916)

Country.	Usance.	Rate of Exchange.		Meaning.	Par.
		July 16, 1914.	*December* 7, 1916.		
Paris	Cheque	25·16¾–17¾	27·79½–81	Francs and centimes to £1	25·22½
Brussels	Cheque	25·29½–30½		,, ,, ,,	25·22½
Berlin	Sight	20·49–50		Marks and pfennigs to £1	20·40
,,	8 days	20·46½		,, ,, ,,	
Vienna	Sight	24·16–18		Kronen and heller to £1	24·02
Amsterdam	,,	12·11¾–12¼	11·65–66½	Florins and cents ,,	12·107
Italy	,,	25·26–28	32·15–22	Lire and centesimi to £1	25·22½
Switzerland	,,	25·18¾–19¼	24·20–30	Francs and centimes to £1	25·22½
Madrid	,,	26·05–15	22·15–25	Pesetas and centesima to £1	25·22½
Lisbon	,,	46½–7/16	31–32	Pence to 1 milreis	53½
St. Petersburg (now Petrograd)	,,	95·75–85	163–164	Roubles and kopeks to £10	94·57
	3 months	95·10		,, ,, ,,	
Christiania	Sight	18·23–26	16·92–97	Kroner and öre to £1	18·159
Copenhagen	,,	18·23⅛–26⅛	17·50–60	,, ,, ,,	18·159
Stockholm	,,	18·23–26	16·32–42	,, ,, ,,	18·159
Bombay and Calcutta	Telegraphic transfers	1s. 3 1/32	1s. 4 9/32–7/32	Shillings and pence to 1 rupee	1s. 4d.
Hongkong	,, ,,	1s. 10⅜	[1] 2s. 3¾	,, ,, 1 dollar	—
Shanghai	,, ,,	2s. 5⅝	[1] 3s. 6	,, ,, 1 tael	—
Singapore	,, ,,	2s. 3 1/16	[1] 2s. 4 3/32–¼	,, ,, 1 dollar	—
Yokohama	,, ,,	2s. 0⅜	[1] 2s. 1 7/16–11/16	,, ,, 1 yen	24·58d.
Alexandria	,, ,,	97⅜	97⅜	Piastres to £1	97½
Rio de Janeiro	90 days	[1] 15 3/16	[1] 12 1/16d.	Pence to 1 milreis	16
Valparaiso	,,	[1] 9¾	[1] 11 13/16d.	,, 1 peso	—
Buenos Ayres	,,	[1] 47 1/16	50¼d.	,, 1 peso or dollar (gold)	47·58
Monte Video	,,	[1] 51 9/32	54 5/16d.	,, ,, ,,	51
New York	Cable transfers	4·87 7/16–1/16	4·76 6/16–7/16	Dollars and cents to £1	4·866

The rates marked [1] are telegraphed on the preceding day.

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TABLE XIV.—EFFECT OF THE WAR ON THE FOREIGN EXCHANGES

(From the *Economist* War Supplement, December 19, 1914, &c.)

Cheques, Telegraphic or Mail Transfers.	*Normal Rate.*	*Rate just before War.*	*Extreme rates about August 1, 1914.*		*To December 19, 1914.*		*Approximate Rates on December 7, 1916.*
			Lowest.	*Highest.*	*Lowest.*	*Highest.*	
Paris	25·22½	25·16	24·00	25·00	24·00	25·50	27·82
Switzerland	25·22½	25·17	Nominal		24·00	26·00	24·25
Brussels and Antwerp	25·22½	25·29	24·00	26·00	24·00	27·50	—
Amsterdam	12·107	12·15	11·90	12·60	11·70	12·60	11·67
Italy	25·22½	25·50	26·00 sellers, no buyers		24·00	28·50	32·25
Madrid	25·22½	26·10	24·00	25·90	24·45	26·70	22·22
Lisbon	53⅛	46½	42		35½	41	32·00
St. Petersburg (now Petrograd)	94·57	97·20	125 sellers, no buyers		110	120	165
Christiania	18·159	18·30	About 18·50		18·30	19·20	16·97
Copenhagen	18·159	18·30	About 18·50		18·30	19·20	17·60
Stockholm	18·159	18·30	About 18·50		18·30	19·20	16·40
Berlin	20·40	20·53½	21·00 sellers, no buyers		—	—	—
Vienna	24·02	24·32	24·60 sellers, no buyers		—	—	—
New York	4·866	4·93	About 6·50		4·93	5·10	4·76 7/16

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TABLE XV.—NEW YORK EXCHANGES ON EUROPE

On the first Monday of each month since July, 1914

(From the *Financial Review* and *Commerce and Finance*, New York)

	Date.	*England. Dollars and cents for £1*	*France. Francs for 1 dollar.*	*Italy. Lire for 1 dollar.*	*Russia. Cents for 1 rouble.*	*Germany. Cents for 4 marks.*	*Austria. Cents for 1 crown.*	*Holland. Cents for 1 florin.*	*Switzerland. Francs for 1 dollar.*
	Par.	4·866	5·18⅛	5·18⅛	51½	95⅛	20¼	40¼	5·18⅛
1914	July 6	4·88	5·15	5·18	51¼	95¼	20¼	40¼	5·16½
	Per cent. on Par	100	99	100	100	100	100	100	99
	July 30–31	6·35	4·25	4·90	51⅛	104	20·37	41	4·65
		130	122	106	100	109	101	102	112
	August 3	6·75							
		139							
	September 8	4·98			No	Quotations			
		102							
	October 5	4·96	5·06	5·29	—	93¼	19·75	40¾	5·04
		102	102	98	—	98	98	101	102
	November 2	4·91	5·13	5·32	48	88¾	17·85	41⅛	5·17
		101	101	97	93	93	88	102	100
	December 7	4·88	5·12	5·26	42¾	92	17·50	40⅝	5·19
		100	101	98	83	96	86	101	100
1915	January 4	100	100	97	83	93	86	101	99
	February 1	100	100	96	85	92	86	100	98
	March 1	99	98	87	86	86	78	99	94
	April 5	99	97	89	83	86	76	97	96
	May 3	99	97	88	80	87	77	97	97
	June 7	98	95	87	77	87	76	100	98
	July 6	98	92	85	74	86	75	100	96

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	August 2	98	91	81	64	86	75	100	96
	September 7	95	86	80	66	85	74	100	97
	October 4	97	90	83	69	88	77	100	98
	November 3	95	87	80	66	86	72	106	97
	December 6	97	88	79	63	83	69	104	97
1916	January 3	97	88	79	57	80	64	108	98
	February 7	98	88	77	58	79	65	104	99
	March 6	98	88	77	62	77	65	106	99
	April 3	98	87	78	62	76	61	106	99
	May 1	98	87	82	60	78	65	104	99
	June 5	98	88	81	59	81	65	102	99
	July 3	98	88	81	59	77	63	102	98
	August 7	98	88	80	59	76	61	102	98
	September 4	98	88	80	66	73	60	102	98
	October 2	98	89	80	62	73	59	101	97
	November 6	98	89	77	59	73	59	101	99
	December 4	98	89	77	58	70	57	101	100
1917	January 2	98	89	75	58	75	58	102	102
	February 5	98	88	71	54	71	53	101	101

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TABLE XVI—MONEY MARKET RATES

(1) LONDON.

(From the *Economist* of July 18, 1914, and December 9, 1916)

Rates.	*Saturday. 11/7/14*	*Monday. 13/7/14*	*Tuesday. 14/7/14*	*Wednesday. 15/7/14*	*Thursday. 16/7/14*	*Friday. 17/7/14*	*Friday. 8/12/16.*
Bank Rate	3	3	3	3	3	3	6
Market Discount Rates :							
60 days Bankers' drafts	2	2	2	2	2 1/16	2	5 3/8–1/2
3 months „ „	2 1/8	2 1/8–1/16	2 1/8–1/16	2 1/8–1/16	2 1/8–1/16	2 1/8	5 1/16–1/2
4 „ „ „	2 1/4	2 1/16–3/8	2 1/16–3/8	2 1/16–3/8	2 1/16–3/8	2 1/4–1/16	5 7/16–9/16
6 „ „ „	3 1/16–1/8	3 1/16–1/8	3 1/16–1/8	3 1/16–1/8	3 1/16–1/8	3 1/16	5 1/2–5/8
Loans, Day to day	1 1/2–3/4	1 1/2	1 1/2–3/4	1 1/2–3/4	1 1/2–3/4	1 1/2	4 1/2–5
„ Short	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	5
„ Fortnight (at last Settlement)	3	3	3	3	3	3	6
Deposit Allowances :							
Banks	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	4
Discount Houses at call	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	4 1/2
„ „ at notice	1 3/4	1 3/4	1 3/4	1 3/4	1 3/4	1 3/4	4 3/4
Discount Treasury Bills							5 1/2
„ War Expenditure Certificates							89

(2) FOREIGN.

	July 17, 1914.		*December 8, 1916.*			*July 17, 1914.*		*December 8, 1916.*	
	Bank Rate.	*Market Rate.*	*Bank Rate.*	*Market Rate.*		*Bank Rate.*	*Market Rate.*	*Bank Rate.*	*Market Rate.*
Paris	3 1/2	2 3/4	5		Petrograd	5	Nominal	6	
Berlin	4	2 1/4	5		Madrid	4 1/2	4	4 1/2	
Amsterdam	3 1/2	3 1/4	4 1/2		Lisbon	5 1/2	5 1/2	5 1/2	
Brussels	4	3 1/2	5		Stockholm	4 1/2	4 1/2	5 1/2	
Vienna	4	3 1/2	5		Christiania	5	5	5 1/2	
Rome	5	4 1/4	5		Copenhagen	5	5	5	
Zurich	3 1/2	2 15/16	4 1/2	4					

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TABLE XVII.—FOREIGN TRADE OF THE UNITED KINGDOM, 1861–1916

(From the Statistical Abstracts and Annual Statement of Trade)

(In millions of £'s)

Year.	*Total Imports (General).*	*Net Imports (Special).*	*Re-exports.*	*Exports of Home Produce (Special).*	*Total Exports (General).*	*Apparent Excess of Imports.*
1861	—	183	—	125	—	58
1871	—	271	—	223	—	48
1881	—	334	—	234	—	100
1891	—	374	—	247	—	127
1901	522	454	68	280	348	174
2	528	463	66	283	349	180
3	543	473	70	291	360	182
4	551	481	70	301	371	180
5	565	487	78	330	408	157
6	608	523	85	376	461	147
7	646	554	92	426	518	128
8	593	513	80	377	457	136
9	625	533	91	378	470	155
1910	678	574	104	430	534	144
1	680	577	103	454	557	123
2	745	633	112	487	599	146
3	769	659	110	525	635	134
4	697	602	95	431	526	171
5	852	753	99	385	484	368
6	949	851	98	507	605	344

Apparent 'Balance' of Trade of certain other countries for comparison.			
Country.	1910	1911	1912
British Empire	+19	— 1	— 29
Russia	+39	+ 36	+ 36
Germany	—72	— 79	— 93
Netherlands	—51	— 50	— 39
Belgium	—35	— 37	— 40
France	—40	— 72	— 60
Italy	—50	— 49	— 56
Austria-Hungary	—18	— 33	— 34
Norway, Sweden and Denmark	—16	— 12	— 20
Switzerland	—23	— 22	— 26
Roumania	+ 8	+ 5	
U.S.A.	+40	+109	+115
Mexico	+ 7	+ 9	+ 12
Cuba	+10	+ 4	+ 5
Brazil	+15	+ 14	+ 11
Argentine	+ 4	— 8	+ 19
Chile	+ 1	— 1	+ 3
Egypt	+ 6	+ 1	+ 9
China	—11	— 13	— 16
Japan	— 3	— 6	— 9

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TABLE XVIII.—COMPOSITION OF THE TRADE OF THE UNITED KINGDOM, 1912–1916

(From the Annual Statement of Trade and Navigation.) In millions of £'s

Articles.	1912		1913		1914		1915		1916	
	Imports.	*Exports.*	*Imports.*	*Exports.*	*Imports.*	*Exports.*	*Imports.*	*Exports.*	*Imports.*	*Exports.*
I. *Food, Drink and Tobacco:*										
A. Grain and Flour	88·5	4·2	85·5	3·6	79·6	3·1	112·4	3·9	133·3	2·8
B. Meat, including animals for food	49·1	1·1	56·7	1·2	63·2	1·1	86·8	1·3	94·1	1·2
C. Other food and drink:										
(1) Non-dutiable	77·3	24·7	81·3	24·4	78·6	19·0	91·5	16·1	94·0	20·7
(2) Dutiable	59·3		58·7		68·0		81·7		90·8	
D. Tobacco	6·4	2·6	8·0	3·4	7·5	3·7	8·5	3·8	7·4	4·8
Total, Class I	280·6	32·7	290·2	32·6	297·0	26·9	380·9	25·1	419·5	29·5
Re-exports	—	15·1	—	15·9	—	17·4	—	22·4	—	21·1
II. *Raw Materials, &c.:*										
A. Coal, Coke, &c.	0·03	42·6	0·04	53·7	0·04	42·2	0·01	38·8	0·01	50·7
B. Iron Ore, Scrap and Steel	6·2	0·4	7·4	0·4	5·5	0·3	7·5	0·2	12·1	0·3
C. Other Metallic Ores	9·1	0·1	10·2	0·1	9·5	0·1	11·6	0·02	13·7	0·02
D. Wood and Timber	28·4	0·3	33·8	0·3	25·3	0·3	32·8	0·2	40·2	0·3
E. Cotton	80·2	—	70·6	—	55·3	—	64·7	—	84·7	—
F. Wool	36·6	4·8	37·7	4·6	34·2	4·5	44·1	3·8	39·8	3·7
G. Other Textiles	18·6	0·5	19·8	0·4	15·4	0·4	21·0	0·5	23·9	0·6
H. Oil Seeds, &c.	37·4	4·6	41·6	4·5	41·3	4·0	49·7	5·4	63·4	4·6
I. Hides and Skins	13·7	2·0	15·1	1·9	12·7	1·5	14·0	0·9	13·9	1·5
J. Paper-making	5·6	0·9	5·8	1·0	6·0	0·8	6·1	0·7	8·1	0·5
K. Miscellaneous	39·7	3·2	39·8	3·0	31·1	2·6	35·0	1·9	37·2	2·1
Total, Class II	275·7	59·4	281·8	69·9	236·5	56·7	286·6	52·4	337·0	64·3
Re-exports	—	67·3	—	64·0	—	53·9	—	54·6	—	49·1

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III. *Manufactured Articles :*										
A. Iron and Steel . .	13·0	48·6	15·3	54·3	10·9	41·7	10·8	40·4	11·2	56·7
B. Other Metals . .	31·2	12·3	32·1	13·3	29·6	10·3	42·2	9·7	39·0	12·7
C. Cutlery, Hardware, &c.	7·0	8·1	7·4	8·0	5·2	6·5	4·9	5·1	5·7	6·4
D. Electrical . .	1·5	4·3	1·6	5·4	1·2	3·0	1·1	3·2	1·7	4·1
E. Machinery . .	6·8	33·2	7·3	37·0	6·7	31·4	8·8	19·2	8·0	20·2
F. Ships (new) . .	0·03	7·0	0·03	11·0	0·03	6·9	0·2	1·7	0·01	1·3
G. Wood and Timber, and Furniture	2·9	2·1	3·6	2·0	2·3	1·6	2·3	1·0	2·0	1·3
H. *Yarns and Fabrics :*										
(1) Cotton . .	11·5	122·2	12·2	127·2	9·4	103·3	7·6	85·9	8·3	118·4
(2) Wool . .	10·1	37·8	10·5	37·8	7·6	31·5	1·7	32·8	0·9	46·9
(3) Silk . .	14·4	2·2	15·1	2·2	13·4	1·9	14·6	1·7	13·1	2·4
(4) Others . .	8·9	14·6	9·1	14·8	7·4	13·0	9·0	11·7	11·2	15·8
I. Apparel . . .	6·0	15·7	6·0	16·4	4·3	14·5	3·0	11·6	2·7	16·9
J. Chemicals and Colours	12·5	21·0	12·9	22·0	12·1	19·5	19·3	22·1	28·7	27·7
K. Leather . . .	14·3	5·2	13·4	5·6	13·5	4·7	17·0	3·8	16·2	4·9
L. Earthenware and Glass	4·2	5·0	4·5	5·2	3·0	4·1	2·1	3·3	3·0	3·9
M. Paper . . .	7·2	3·6	7·7	3·7	6·8	3·2	6·6	3·0	8·3	5·2
N. Railway Stock, Motors, &c.	7·9	9·8	8·4	11·4	7·3	11·2	9·1	6·6	6·0	8·0
O. Miscellaneous . .	26·0	32·4	26·5	34·2	19·9	30·4	20·8	30·2	23·1	40·7
Total, Class III	185·5	385·0	193·6	411·4	160·5	338·6	181·4	292·9	189·3	393·7
Re-exports . .	—	29·2	—	29·5	—	24·1	—	22·0	—	27·3
IV. Miscellaneous (including Parcel Post)	2·9	10·1	3·1	11·4	2·6	8·4	3·0	14·5	3·4	19·0
Re-exports . .	—	0·2	—	0·1	—	0·08	—	0·06	—	0·1
Total	744·6	487·2	768·7	525·2	696·6	430·7	851·9	384·9	949·2	506·5
Re-exports . .	—	111·7	—	109·6	—	95·5	—	99·1	—	97·6
Bullion . . .	69·5	64·9	74·0	62·1	70·6	41·5	21·4	46·6	31·5	59·3
Grand Total	814·1	663·8	842·7	696·9	767·2	567·7	873·3	530·6	980·7	663·4

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TABLE XIX.—DIRECTION OF THE TRADE OF THE UNITED KINGDOM, 1912–1915.

(From the Annual Statement of Trade for 1915)

(In millions of £'s)

Country.	*Imports.*				*Exports.*				*Excess of Imports — or Exports +.*			
	1912	1913	1914	1915	1912	1913	1914	1915	1912	1913	1914	1915
FOREIGN.												
Russia	40·5	40·3	28·1	21·4	21·7	27·7	21·8	24·9	−18·8	−12·6	− 6·3	+ 3·5
Norway	6·9	7·4	7·7	13·7	6·0	6·7	7·2	9·4	− 0·9	− 0·7	− 0·5	− 4·3
Sweden	13·2	14·2	14·1	19·8	8·1	9·2	9·0	10·2	− 5·1	− 5·0	− 5·1	− 9·6
Denmark	22·1	23·8	25·4	22·6	6·2	6·3	7·2	11·9	−15·9	−17·5	−18·2	−10·7
Netherlands	21·4	23·6	24·3	23·4	19·4	20·5	20·7	30·5	− 2·0	− 3·1	− 3·6	+ 7·1
Belgium	23·6	23·4	16·1	1·6	19·6	20·7	13·3	0·2	− 4·0	− 2·7	− 2·8	− 1·4
Germany	70·0	80·4	47·0	—	59·6	60·5	36·4	—	−11·4	−19·9	−10·6	—
France	45·6	46·4	37·8	31·4	37·5	40·9	35·1	81·2	− 8·1	− 5·5	− 2·7	+51·2
Switzerland	10·6	11·1	10·0	15·3	4·8	5·1	3·6	4·1	− 5·8	− 6·0	− 6·4	−11·2
Spain	14·6	14·4	14·1	18·9	7·7	8·6	7·1	7·5	− 5·8	− 6·0	− 7·0	−11·4
Italy	8·2	8·1	8·7	11·3	15·0	15 6	13·9	17·6	+ 6·8	+ 7·5	+ 5·2	+ 6·3
Austria-Hungary	7·0	7·7	4·4	—	6·2	5·8	3·4	—	− 0·8	− 1·9	− 1·0	—
Egypt [1]	25·8	21·4	17·1	(21·8)	9·6	10·0	7·9	(8·6)	−16·2	−11·4	− 9·2	(−13·2)
China	4·9	4·7	4·7	7·0	10·9	15·0	13·1	8·6	+ 6·0	+10·3	+ 8·4	+ 1·6
Japan	3·9	4·4	4·1	9·4	12·5	14·8	8·6	5·2	+ 8·6	+10·4	+ 4·5	− 4·2
U.S.A.	134·6	141·7	138·6	237·8	64·6	59·5	64·0	56·5	−70·0	−82·2	−74·6	−181·3
Brazil	9·4	10·0	8·0	8·3	13·2	13·0	6·6	5·6	+ 3·8	+ 3·0	− 1·4	− 2·7
Chile	5·0	5·4	5·3	9·6	6·5	6·4	4·0	2·0	+ 1·5	+ 1·0	+ 1·3	− 7·6
Argentine	40·8	42·5	37·2	63·9	21·3	23·4	15·1	12·1	+ 1·5	−19·1	−22·1	−51·8
Others	49·5	46·3	56·1	64·7	57·0	56·2	44·3	35·6	+ 7·5	+10·9	−11·8	−29·1
Total Foreign	558·6	577·2	508·8	580·1 [2]	407·4	425·9	342·3	323·1 [2]	−151·2	−151·3	−166·5	−257·0

[1] Included under British Empire since 1915.

[2] Excluding Egypt.

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Country.	Imports.				Exports.				Excess of Imports — or Exports +.			
	1912	1913	1914	1915	1912	1913	1914	1915	1912	1913	1914	1915
BRITISH EMPIRE.												
Canada . . .	26·9	30·5	31·5	41·0	27·3	27·3	20·5	16·0	+ 0·4	— 3·2	—11·0	—25·0
Australia . . .	36·1	38·1	36·9	45·2	38·3	37·8	37·1	31·9	+ 2·2	— 0·3	+ 0·2	—13·3
New Zealand . .	20·3	20·3	23·0	30·4	11·2	11·8	10·4	10·1	— 9·1	— 8·5	—12·6	—20·3
India . . .	52·1	48·4	43·3	62·2	59·8	71·7	63·8	46·9	+ 7·7	+23·3	+20·5	—15·3
Straits Settlements and F.M.S.	18·1	19·3	16·4	20·0	6·1	7·4	5·8	4·4	—12·0	—11·9	—11·6	—15·6
South Africa[1] . .	11·4	12·5	11·1	11·5	24·2	25·0	21·2	20·6	+12·8	+12·5	+10·1	+ 9·1
Others . . .	11·1	22·4	25·6	39·5	24·6	27·9	25·1	22·3	+13·5	+ 5·5	— 0·5	—17·2
Total British .	186·0	191·5	187·8	271·8[2]	191·5	208·9	183·9	160·8[2]	+ 5·5	+17·4	— 3·9	—111·0
Grand Total .	744·6	768·7	696·6	851·9	599·0	634·8	526·2	483·9	—145·6	—133·9	—170·4	—368·0

[1] Not including gold.

[2] Including Egypt (see above).

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TABLE XX—MONTHLY TRADE RETURNS OF THE UNITED KINGDOM, 1913–1917

(From the Monthly Accounts of Trade and Navigation.) In millions of £'s

	Jan.	*Feb.*	*Mar.*	*April.*	*May.*	*June.*	*July.*	*Aug.*	*Sept.*	*Oct.*	*Nov.*	*Dec.*	*Totals.*	*Monthly Average.*
1913														
Imports . .	71·2	63·8	61·3	63·0	61·3	58·3	61·8	56·0	61.4	71·7	68·5	71·1	768·7	64·1
Exports [1] .	56·2	50·9	51·3	53·1	53·2	51·4	55·5	52·3	49·3	56·2	52·8	53·1	634·8	52·9
Apparent excess of imports	15·0	12·9	10·0	9·9	8·1	6·9	6·3	3·7	12·1	15·5	15·7	18·0	133·9	11·2
1914														
Imports . .	68·0	62·1	66·9	61·6	59·1	58·3	59·4	42·3	45·0	51·4	55·5	67·3	696·6	58·1
	— 3·2	*— 1·7*	*+ 5·6*	*— 1·3*	*— 2·2*	*—*	*— 2·4*	*—13·6*	*—16·3*	*—20·2*	*—13·0*	*— 3·8*	*— 72·1*	*— 6·0*
Exports . .	57·4	51·5	54·1	50·7	52·4	48·6	52·2	28·6	31·9	35·8	30·2	32·1	526·2	43·9
	+ 1·2	*+ 0·6*	*+ 2·8*	*— 2·4*	*— 0·8*	*— 2·8*	*— 3·3*	*—23·7*	*—17·4*	*—20·4*	*—22·6*	*—21·0*	*—108·6*	*— 9·0*
Excess . .	10·6	10·6	12·8	10·9	6·7	9·7	7·2	13·7	13·1	15·6	25·3	35·2	170·4	14·2
	— 4·4	*— 2·3*	*+ 2·8*	*+ 1·0*	*— 1·4*	*+ 2·8*	*+ 0·9*	*+10·0*	*+ 1·0*	*+ 0·1*	*+ 9·6*	*+17·2*	*+ 36·5*	*+ 3·0*

[1] Including Re-exports of Foreign and Colonial merchandise throughout.
[2] Uncorrected figures.
The figures in italics show the comparison monthly with the corresponding period in 1913.

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1915														
Imports [2]	.	67·4	65·3	75·6	73·7	71·6	76·1	75·5	69·5	70·3	67·8	71·6	70·9	853·8	71·2
		− 3·8	+ 1·5	+14·3	+10·7	+10·3	+17·8	+13·7	+13·5	+ 8·9	− 3·9	+ 3·1	− 0·2	+ 85·1	+ 7·1
Exports [2]	.	35·1	33·0	38·2	42·1	43·9	42·6	44·1	39·8	39·8	39·1	44·0	41·6	483·4	40·3
		−21·1	−17·9	−13·1	−11·0	− 9·3	− 8·8	−11·4	−12·5	− 9·5	−17·1	− 8·8	−11·5	−151·4	− 12·6
Excess [2]	.	32·3	32·3	37·4	31·6	27·7	33·5	31·4	29·7	30·5	28·7	27·6	29·3	370·4	30·9
		+17·3	+19·4	+27·4	+21·7	+19·6	+26·6	+25·1	+26·0	+18·4	+13·2	+11·9	+11·3	+236·5	+ 19·7
1916															
Imports [2]	.	74·9	67·3	86·1	75·7	83·8	87·0	76·8	76·1	77·5	81·1	88·9	75·4	949·2	79·1
		+ 3·7	+ 3·5	+24·8	+12·7	+22·5	+28·7	+15·0	+20·1	+16·1	+ 9·4	+20·4	+ 4·3	+180·5	+ 15·0
Exports [2]	.	45·6	44·8	46·4	44·9	58·0	56·2	54·2	55·4	50·6	52·4	49·5	45·9	603·9	50·3
		−10·6	− 6·1	− 4·9	− 9·2	+ 4·8	+4·8	− 1·3	+ 3·1	+ 1·3	− 3·8	− 3·3	− 7·2	− 30·9	− 2·6
Excess [2]	.	29·3	22·5	39·7	30·8	25·8	30·8	22·6	20·7	26·9	28·7	39·4	29·5	345·3	28·8
		+14·3	+ 9·6	+29·7	+20·9	+17·7	+23·9	+16·3	+17·0	+14·8	+13·2	+23·7	+11·5	+211·4	+ 17·6
1917															
Imports [2]	.	90·6	70·9												
		+19·4	+ 7·1												
Exports [2]	.	55·3	46·3												
		−0·9	− 4·6												
Excess [2]	.	35·3	24·6												
		+20·3	+11·7												

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TABLE XXI.—VOLUME OF BRITISH IMPORTS AND SHIPPING, 1913–1916

(From the Report of the Liverpool Steamship Owners' Association, 1916)

	Periods of Six Months ending							*Percentage of (7) on (1).*
	Jan. 31, 1914.	*July* 31, 1914.	*Jan.* 31, 1915.	*July* 31, 1915.	*Jan.* 31, 1916.	*July* 31, 1916.	*Jan.* 31, 1917.	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	
			In millions of tons.					
Weights of Imports :								
Food, drink, and tobacco	8·7	7·4	9·1	7·6	8·0	7·6	6·9	*79*
Raw materials	14·4	12·0	10·7	11·7	11·6	10·9	10·4	*72*
Manufactured articles	3·2	3·3	1·6	2·1	2·0	1·5	1·3	*41*
Articles for which weights are not given (estimates)	3·6	3·1	2·9	2·9	2·9	2·7	2·5	*70*
Totals	29·8	25·8	24·3	24·2	24·6	22·7	21·1	*71*
			In millions of Net Register tons.					
Tonnage Entrances :								
British ships	16·6	16·1	12·3	11·6	11·3	9·9	10·1	*61*
Foreign ships	8·6	8·2	5·4	5·4	5·5	5·1	4·6	*53*
Totals	25·2	24·3	17·7	17·1	16·7	15·0	14·7	*58*
Average weight of imports per 100 tons net of shipping entrances	118	106	138	142	147	152	143	*122*

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DIAGRAMS

A. Monthly Index Numbers of Wholesale and Retail Prices, 1913–17.

B. Monthly Trade Returns, 1913–17.

C. Index Numbers of Wholesale Prices, 1782–1916, Gold and Silver Production, and Credit.

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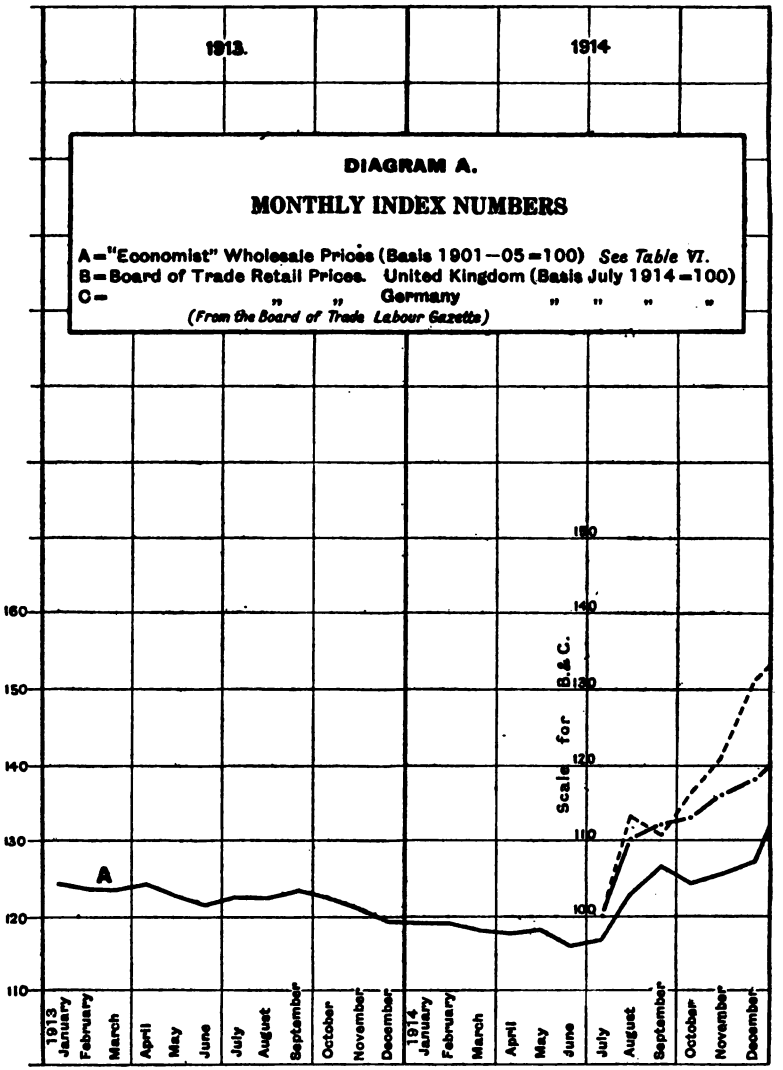

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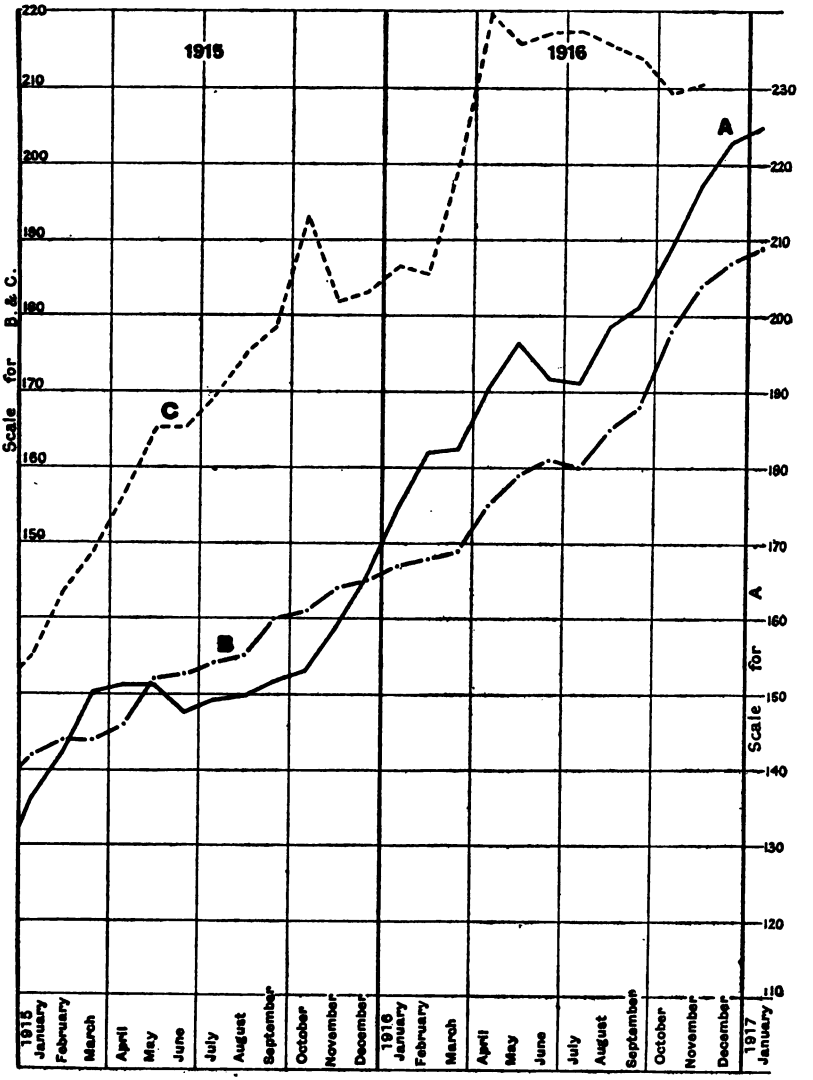

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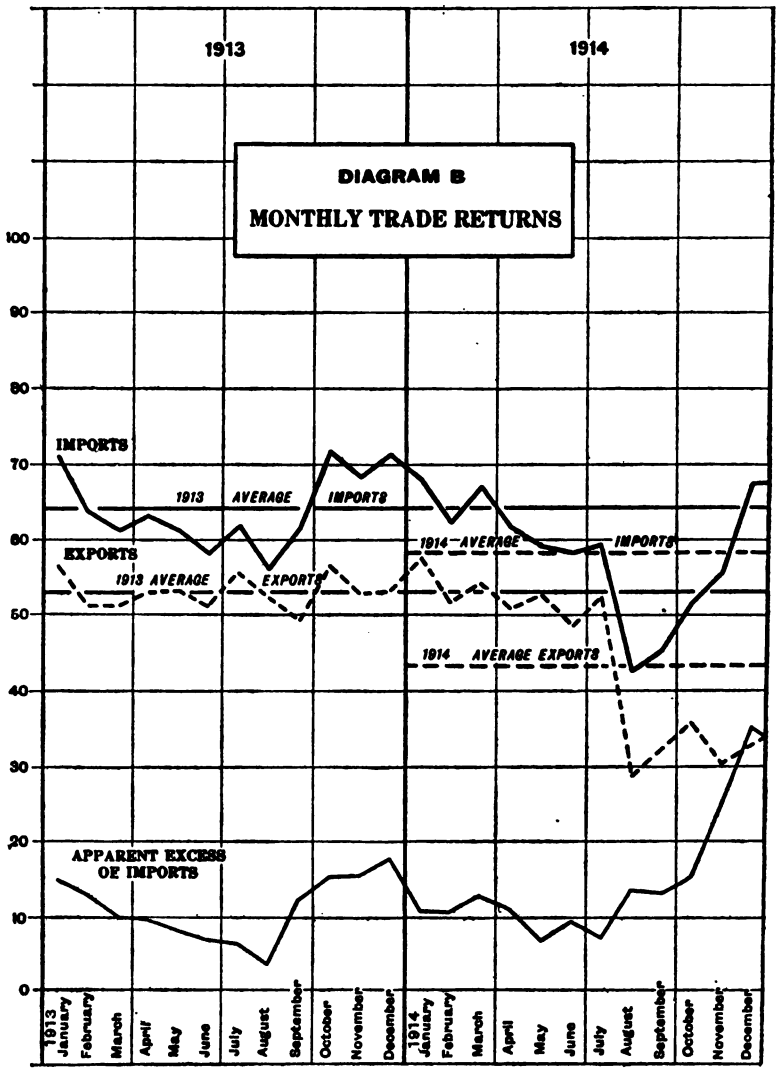

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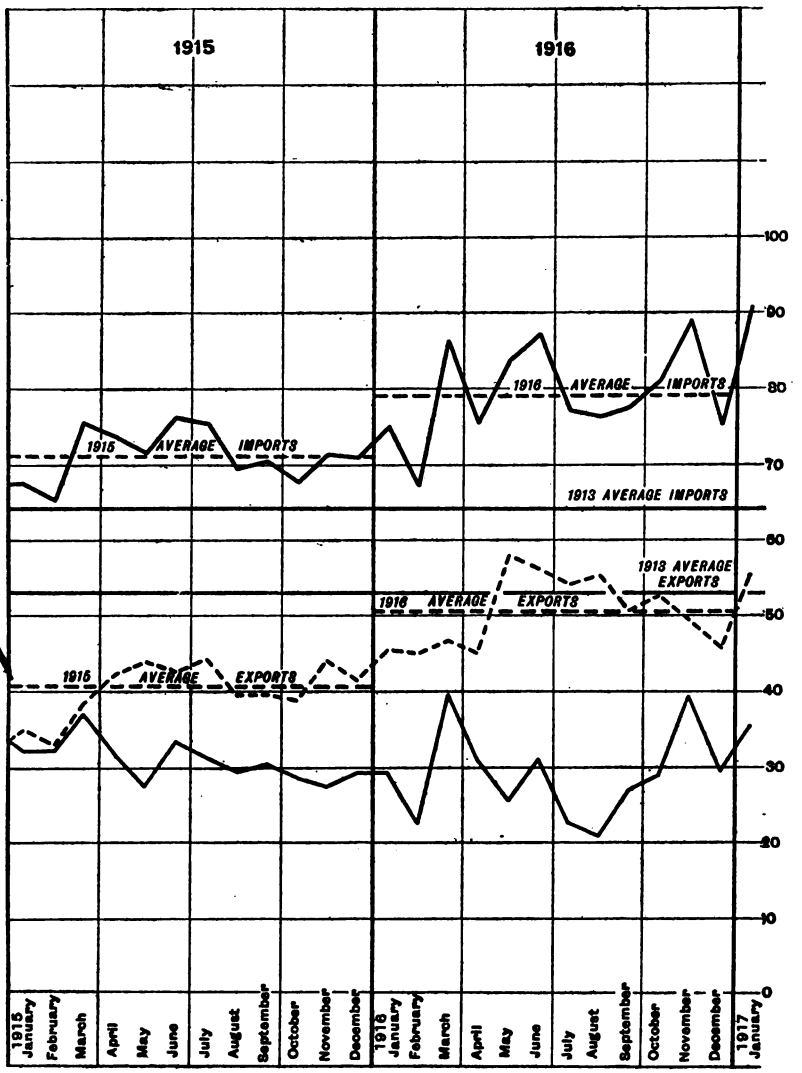

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